

### Report to Congressional Committees

August 2023

# PERSONNEL VETTING

DOD Needs a
Reliable Schedule
and Cost Estimate
for the National
Background
Investigation Services
Program

Highlights of GAO-23-105670, a report to congressional committees

#### Why GAO Did This Study

U.S. government personnel vetting processes, such as background investigations, rely on information technology systems to process and validate data on millions of federal employees and contractor personnel. In 2016, DOD assumed responsibility for developing new systems following a 2015 cybersecurity incident that compromised data from Office of Personnel Management systems. DOD is developing the NBIS system to replace those legacy systems.

House Report 117-118, accompanying a bill for the National Defense
Authorization Act for Fiscal Year 2022, includes a provision for GAO to evaluate the NBIS program. GAO assessed (1) the status of NBIS system development, and the reliability of the schedule and cost estimate for the NBIS program; and (2) the extent to which DCSA is engaging stakeholders in the development of NBIS system requirements and capabilities.

GAO reviewed budget documentation, assessed DCSA's schedule and cost estimate for NBIS against GAO best practices, and surveyed federal and industry security personnel at 71 organizations, with an 86 percent response rate.

#### What GAO Recommends

Congress should consider requiring DOD to develop a reliable NBIS program schedule and cost estimate based on GAO best practices. GAO also recommends that DOD assess and use GAO's survey results to improve engagement with stakeholders. DOD concurred with GAO's recommendation.

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#### August 2023

#### PERSONNEL VETTING

## DOD Needs a Reliable Schedule and Cost Estimate for the National Background Investigation Services Program

#### What GAO Found

The Department of Defense (DOD), through its Defense Counterintelligence and Security Agency (DCSA), conducts personnel vetting for the majority of the federal workforce. Since 2016, DOD has delivered some capabilities through a new information technology system—the National Background Investigation Services (NBIS) system—intended to support all phases of personnel vetting. NBIS system capabilities, once fully deployed, should enable users to complete electronic forms, manage investigations, record decisions, and more. However, DOD lacks a reliable schedule and cost estimate for NBIS.

Extent to Which the National Background Investigation Services Schedule and Cost Estimate Meets Best Practices

Schedule		Cost estimate	
Comprehensive		Accurate	
Controlled		Comprehensive	
Credible		Credible	0
Well-constructed		Well-documented	
Fully met	Substantially met P	artially met Minim	nally met Not met

Source: GAO analysis of information for the National Background Investigation Services (NBIS) program. | GAO-23-105670

DCSA has deployed some NBIS system capabilities, such as an eApplication, to collect the necessary data to begin a background investigation. However, NBIS was originally slated to be fully operational in 2019. In 2020, DCSA revised NBIS program milestones, but it continues to face delays. DCSA now projects that legacy systems will be decommissioned by the end of 2024. In 2021, GAO recommended that DCSA develop a reliable schedule, which DCSA has not done. The lack of progress in addressing schedule weaknesses could further delay NBIS implementation and the planned replacement of legacy systems. Moreover, GAO found the NBIS program's cost estimate from 2022 is not reliable, meaning that DCSA may be unable to accurately project NBIS costs. Given that DOD has spent over a half a billion dollars on NBIS since 2016, a reliable cost estimate would help ensure that it is collecting the data necessary to match NBIS requirements to its budget and reduce risks of cost overruns that may hinder the program's progress.

DCSA has identified stakeholders for the NBIS program—including 115 federal agencies and around 13,000 industry organizations—and has worked with them while developing NBIS. Federal and industry stakeholders that responded to GAO's survey were generally satisfied with DCSA's engagement, initial training, and opportunities to provide feedback. For example, around 92 percent of respondents said they had engaged with the NBIS team. However, some stakeholders noted concerns with transitioning their respective organizations to use NBIS and the status of the NBIS system itself. Analyzing GAO's survey results could help DCSA identify areas where it can enhance its efforts to meet stakeholder needs.

United States Government Accountability Office

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#### **Abbreviations**

DCSA	Defense Counterintelligence and Security Agency
DOD	Department of Defense
IT	information technology
NBIS	National Background Investigation Services
ODNI	Office of the Director of National Intelligence
OMB	Office of Management and Budget
OPM	Office of Personnel Management
PAC	Performance Accountability Council

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August 17, 2023

#### **Congressional Committees**

Personnel vetting processes can help determine the trustworthiness of the federal government's workforce; minimize risks to the nation from personnel not being suitable for government employment; and prevent unauthorized disclosure of classified information that could cause damage to U.S. national security.¹ The Department of Defense's (DOD) Defense Counterintelligence and Security Agency (DCSA) conducts personnel vetting operations, including background investigations, adjudications, continuous vetting, and insider threat analysis, for the majority of the federal workforce. Specifically, DCSA conducts 95 percent of all background investigations for over 100 agencies.

In 2016, the President assigned DOD the responsibility for developing and operating information technology (IT) systems for personnel vetting processes.<sup>2</sup> This followed a 2015 cybersecurity incident that compromised Office of Personnel Management (OPM) systems containing data on over 21 million federal employees and contractor personnel. DOD set up the National Background Investigation Services (NBIS) program and started developing the NBIS system in late 2016.<sup>3</sup>

<sup>1</sup>See Federal Personnel Vetting Core Doctrine, 86 Fed. Reg. 2,705 (Jan. 13, 2021); Exec. Order No. 13,526, Classified National Security Information, § 1.2, 75 Fed. Reg. 707, 707-08 (Dec. 29, 2009).

<sup>2</sup>Specifically, in 2016, Executive Order No.13,467, as amended through Executive Order No. 13,741, assigned DOD the role of designing, developing, deploying, operating, securing, defending, and continuously updating and modernizing personnel vetting IT systems that support all background investigation processes that had been conducted by the National Background Investigations Bureau within the Office of Personnel Management. Exec. Order No. 13,467, *Reforming Processes Related to Suitability for Government Employment, Fitness for Contractor Employees, and Eligibility for Access to Classified National Security Information*, § 2.4(b) (June 30, 2008), as amended by Exec. Order No. 13,741, *Amending Executive Order 13467 To Establish the Roles and Responsibilities of the National Background Investigations Bureau and Related Matters*, § 1(f), 81 Fed. Reg. 68,289, 68,290 (Sept. 29, 2016).

<sup>3</sup>The term "NBIS program" refers to the NBIS Program Management Office and its management of the program as a whole, including related subprojects such as acquisition, engineering, training, cybersecurity, etc. In this report, we use the term "NBIS system" to refer to the set of sub-systems and associated capabilities that is the focus of the software development effort.

In January 2018, we placed the government-wide personnel security clearance process on GAO's High-Risk List due to factors that included delays in completing the security clearance process, a lack of measures to determine the quality of investigations, and issues with the IT systems supporting the process.<sup>4</sup> In 2019, DOD established DCSA and it subsequently assumed responsibility for developing the NBIS system and replacing legacy OPM systems. In 2021, we reported that DOD did not have a reliable schedule to help manage NBIS and recommended, among other things, that DOD revise the NBIS schedule to fully meet the characteristics of a reliable schedule.<sup>5</sup>

House Report 117-118, accompanying a bill for the National Defense Authorization Act for Fiscal Year 2022, includes a provision for us to evaluate the NBIS program.<sup>6</sup> In this review, we assess (1) the status of NBIS system development, and the reliability of the schedule and cost estimate for the NBIS program; and (2) the extent to which DCSA is engaging stakeholders in the development of NBIS system requirements and capabilities. We are conducting a separate review of NBIS cybersecurity that we expect to complete in fiscal year 2024.

To address our first objective, we reviewed DCSA documentation on the status of NBIS system development and evaluated DCSA's schedule and cost estimate for the NBIS program against best practices in GAO's *Schedule Assessment Guide* and GAO's *Cost Estimating and Assessment Guide*. These guides and their respective best practices are also referenced in GAO's *Agile Assessment Guide*, which we used

<sup>&</sup>lt;sup>4</sup>We found that the government-wide personnel security clearance process continues to face challenges in the timely processing of clearances, challenges measuring the quality of investigations, and challenges with IT systems. We have made numerous recommendations to address these challenges. For more information on our previous recommendations, see GAO, *High-Risk Series: Efforts Made to Achieve Progress Need to Be Maintained and Expanded to Fully Address All Areas*, GAO-23-106203 (Washington, D.C.: Apr. 20, 2023).

<sup>&</sup>lt;sup>5</sup>GAO, *Personnel Vetting: Actions Needed to Implement Reforms, Address Challenges, and Improve Planning*, GAO-22-104093 (Washington, D.C.: Dec. 9, 2021). DOD concurred with the recommendations directed to it from this report, including revising the NBIS schedule to meet best practices.

<sup>&</sup>lt;sup>6</sup>H.R. Rep. No. 117-118, at 220-21 (2021).

<sup>&</sup>lt;sup>7</sup>GAO, Schedule Assessment Guide: Best Practices for Project Schedules, GAO-16-89G (Washington, D.C.: Dec. 2015); and GAO, Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs, GAO-20-195G (Washington, D.C.: Mar. 2020).

because Agile is an approach to software development that NBIS program officials stated that they follow.<sup>8</sup> We also discussed the reliability of the NBIS program's schedule and cost estimate with NBIS program officials at DCSA.

For our second objective, we surveyed 71 organizations—59 federal agencies and 12 industry organizations—about their experiences with the development and implementation of the NBIS system. We administered the survey from October 26, 2022, to November 23, 2022. We received responses from 51 of 59 federal agencies and 10 of 12 industry organizations—an 86 percent response rate. We also evaluated DCSA stakeholder engagement by comparing NBIS program software development documentation against our best practices for Agile adoption and implementation.<sup>9</sup> A more detailed description of our scope and methodology is in appendix I.

We conducted this performance audit from January 2022 to August 2023 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

#### Personnel Vetting and Trusted Workforce 2.0

Personnel vetting is the process by which individuals undergo investigation, evaluation, and adjudication. This process determines whether they are, and remain over time, eligible to access classified information or to hold a sensitive position; suitable or fit for federal employment or to perform work for or on behalf of the government as

<sup>&</sup>lt;sup>8</sup>GAO, *Agile Assessment Guide: Best Practices for Agile Adoption and Implementation*, GAO-20-590G (Washington, D.C.: Sept. 28, 2020). Agile methodology is an approach to software development in which software is developed incrementally and is continuously evaluated for functionality, quality, and customer satisfaction. The process starts with strategy, followed by requirements management, and then user stories. Agile can reduce the risks of funding a program that fails or produces outdated technology. Agile programs should also maintain reliable schedules and cost estimates.

<sup>&</sup>lt;sup>9</sup>GAO-20-590G.

contractor employees; or eligible for access to agency systems or facilities.

The Security, Suitability, and Credentialing Performance Accountability Council (PAC) is responsible for government-wide implementation of reforms to personnel vetting. <sup>10</sup> The PAC has four principal members: the Deputy Director for Management of the Office of Management and Budget (OMB); the Director of National Intelligence (DNI); the Director of OPM; and the Under Secretary of Defense for Intelligence and Security.

The PAC Principals announced in March 2018 a government-wide initiative to fundamentally overhaul the federal personnel vetting process through a series of policy and procedural reforms called Trusted Workforce 2.0. The initiative aims to reduce the time required to bring new hires onboard, enable mobility of the federal workforce, and improve insight into workforce behaviors while mitigating risk. The PAC Principals divided implementation of this initiative into two phases: (1) reduce and eliminate the backlog of background investigations conducted by DCSA; and (2) establish a new government-wide approach to personnel vetting.

As we reported in 2021, the PAC has made progress in implementing both phases. <sup>11</sup> This includes requiring federal agencies to adopt continuous vetting in two interim phases—Trusted Workforce 1.25 and 1.5, as described in guidance in 2020 and 2021. <sup>12</sup> In 2022, the PAC issued other key Trusted Workforce 2.0 policies, including updated investigative standards that also address continuous vetting. <sup>13</sup>

<sup>&</sup>lt;sup>10</sup>The PAC was established in June 2008 by Executive Order 13,467. See Exec. Order No. 13,467, § 2.2(c), (d), 73 Fed. Reg. 38,103, 38,105 (June 30, 2008).

<sup>&</sup>lt;sup>11</sup>GAO-22-104093. According to PAC documentation, DCSA has eliminated its backlog and maintained its target inventory since the third quarter of fiscal year 2021.

<sup>&</sup>lt;sup>12</sup>See DNI and Director, OPM Memorandum, *Transforming Federal Personnel Vetting: Measures to Expedite Reform and Further Reduce the Federal Government's Background Investigation Inventory* (Feb. 3, 2020); DNI and Director, OPM Memorandum, *Transforming Federal Personnel Vetting: Continuous Vetting and Other Measures to Expedite Reform and Transition to Trusted Workforce 2.0* (Jan. 15, 2021). Continuous vetting involves reviewing the background of a covered individual at any time to determine whether that individual continues to meet applicable requirements and allows for the replacement of traditional, time-based periodic reinvestigations.

<sup>&</sup>lt;sup>13</sup>DNI and Director, OPM Memorandum, *Federal Personnel Vetting Investigative Standards* (May 17, 2022).

### DCSA and Background Investigation Services

According to an official from the PAC Program Management Office, the most important factor in implementing Trusted Workforce 2.0 is DCSA's development of supporting IT systems like the NBIS system. Following the 2015 OPM cybersecurity incident that compromised data on millions of federal employees and contractors, DOD directed the Defense Information Systems Agency (DISA) to lead the acquisition of a new IT system to replace all OPM legacy IT systems supporting background investigation processes. In 2016, DISA established the NBIS Program Management Office and, according to DOD, awarded the initial other transaction agreement (a contracting mechanism) in 2018 to develop the NBIS system.<sup>14</sup>

In 2019, DOD then established DCSA to assume responsibility from OPM for conducting background investigation operations for most executive branch agencies. <sup>15</sup> DOD subsequently transferred the NBIS Program Management Office from DISA to DCSA on October 1, 2020. DCSA also took over the ownership and maintenance of OPM legacy systems on that date. DCSA is now the federal government's primary investigative service provider and conducts more than 95 percent of the government's background investigations. <sup>16</sup> Figure 1 below shows a timeline of IT-related events for background investigations since 2015.

<sup>&</sup>lt;sup>14</sup>Other transaction agreements are agreements other than procurement contracts, cooperative agreements, and grants which are not subject to certain federal laws and regulations. DISA stated it used an other transaction agreement for NBIS development to acquire leading-edge technologies by tapping into a non-traditional defense contractor base and to engage industry for a broad range of research and prototyping activities.

<sup>&</sup>lt;sup>15</sup>See Exec. Order No. 13,869, *Transferring Responsibility for Background Investigations to the Department of Defense*, 84 Fed. Reg. 18,125 (Apr. 24, 2019) (amending Executive Order No. 13,467). Section 925 of the National Defense Authorization Act for Fiscal Year 2018 generally resulted in the transfer of background investigations from OPM to DOD for DOD personnel. See Pub. L. No. 115-91, § 925(a)-(d) (2017). In addition to implementing section 925, Executive Order 13,869 transferred responsibility to DCSA for conducting national security background investigations for most other executive branch agencies. It further facilitated the delegation of responsibility for suitability and fitness background investigations for most non-DOD agencies from OPM to DCSA. *See* Exec. Order No. 13,869, §§ 1, 2 (amending section 2.6 of Executive Order No. 13,467).

<sup>&</sup>lt;sup>16</sup>While DCSA conducts 95 percent of the government's background investigations, some executive branch agencies have the authority to conduct all or some of their own investigations, according to ODNI. Such agencies include the Central Intelligence Agency, the Federal Bureau of Investigation, and the State Department, as well as some DOD components including the National Security Agency. According to OPM officials, OPM also delegates to DCSA and several other agencies the authority to conduct their own suitability, fitness, and credentialing investigations.

### Figure 1: Timeline of Information Technology (IT)-Related Events for Background Investigation Processes, 2015–2024, as of February 2023

#### O Summer 2015

OPM reports IT cybersecurity incident that compromised background investigation data.

#### Summer through Fall 2016

The President assigns DOD the responsibility for modernizing IT systems that support background investigation processes. DOD directs the Defense Information Systems Agency (DISA) to lead the acquisition of the National Background Investigation Services (NBIS) program.

#### Summer 2018

DISA awards the initial NBIS software development via a contracting mechanism known as an other transaction agreement and develops the Agile framework—a method to develop large IT systems.

#### Fall 2020

NBIS program transitions from DISA to the Defense Counterintelligence and Security Agency (DCSA), which also assumes control of OPM legacy IT systems.

#### Winter 2021

DCSA begins process of introducing federal and industry users to NBIS and initiating background investigation cases through NBIS.

#### Fall 2023

DCSA's projected delivery of all initial NBIS capabilities to the federal government and industry.

#### Fall 2024

DCSA's projected decommissioning of all legacy IT systems that support personnel vetting.

Source: GAO analysis of Office of Personnel Management (OPM) and Department of Defense (DOD) data. | GAO-23-105670

### NBIS System Planned Capabilities

The NBIS system's capabilities, once fully deployed, will include a range of software tools and data repositories to enable personnel vetting. This includes the completion of electronic forms by individuals who are subject to personnel vetting, investigation management, subject management, the recording of background investigation adjudication decisions, continuous vetting, and other processes related to managing the background investigation records of federal employees, military personnel, and contractors. 17 The government's full implementation of NBIS system capabilities should enable the transition from legacy personnel vetting systems and the incremental decommissioning of those

<sup>&</sup>lt;sup>17</sup>According to NBIS program documentation, the program has fully deployed a NBIS system capability after delivering a complete set of code for one of the four phases of personnel vetting (initiation, investigation, adjudication, and continuous vetting).

legacy systems. 18 According to the NBIS program, full implementation of NBIS will have occurred when DCSA is able to operationalize deployed capabilities for all users and legacy systems are no longer required. Figure 2 provides an overview of selected NBIS planned system capabilities that are being deployed incrementally to support personnel vetting under Trusted Workforce 2.0 policy.

Figure 2: Planned National Background Investigation Services (NBIS) System Capabilities for Personnel Vetting



investigations.

(eApp) replaces the Electronic Questionnaires for Investigations Processing (e-Qip), a web-based system that enables the

government to collect information

for conducting background

The NBIS Electronic Application

NBIS will be configurable to support Trusted Workforce 2.0—a series of policy reforms to the background investigation process. NBIS currently includes an updated position designation tool to assess the duties and responsibilities of

individual positions and determine

the level of investigation required.

Investigation



#### Adjudication

NBIS will enable the recording and display of national security, suitability or fitness, and credentialing determinations and be configurable to support finalized Trusted Workforce 2.0 policy. It will also include a subject management capability to enable organizations to track ongoing case activities, send visit requests, and respond to adjudication activities.



#### **Continuous vetting**

NBIS will enable management of alerts from required data sources for continuous vetting of personnel, which is a service that the Defense Counterintelligence and Security Agency (DCSA) provides to most of the government in compliance with Trusted Workforce policy.

Source: GAO analysis of Department of Defense information. | GAO-23-105670

Note: For purposes of this report, we use national security determinations and background investigations to refer to determination or investigation of an individual's eligibility to access classified information or to hold a sensitive position.

#### **NBIS Program** Management and Stakeholders

DCSA's NBIS Program Management Office is responsible for maintaining, and eventually replacing, legacy IT systems that enable current background investigation processes to continue as it delivers NBIS capabilities. NBIS program officials work directly with DCSA internal mission components that carry out the agency's personnel vetting mission for most federal government agencies. These DCSA components include Background Investigations, Vetting Risk Operations, and Consolidated Adjudication Services. 19

<sup>&</sup>lt;sup>18</sup>According to NBIS program documentation, decommissioning means the termination of legacy systems operations. The system is turned off and personnel are no longer needed to maintain the applications and data on the system.

<sup>&</sup>lt;sup>19</sup>These DCSA organizational components carry out the agency's personnel vetting mission. Background Investigations staff carry out around 2 million background investigations each year for the federal government. Consolidated Adjudication Services is the sole authority to determine security clearance eligibility of non-intelligence agency DOD personnel. Vetting Risk Operations leads the implementation of continuous vetting services.

The NBIS program also engages with external organizations that will use the NBIS system. Federal users include personnel security managers at more than 100 federal departments and agencies that will rely on the NBIS system for case initiation or continuous vetting. Industry users include facility security personnel at over 13,000 organizations across the United States that work with the federal government.

### NBIS Program Cost and Personnel

DOD funds both NBIS system development and the maintenance of the current legacy systems used for personnel vetting until they are replaced by NBIS. DOD spent around \$654 million to develop the NBIS system for fiscal years 2017 through 2022, according to DOD budget justification documents. According to DOD officials, in general, government employees manage the NBIS program while contractors provide software development support. As of March 2023, the NBIS Program Management Office consisted of 149 government civilian positions, of which 37 were vacant. NBIS system software testing is conducted by DOD's Joint Interoperability and Testing Command in collaboration with DOD Operational Testing and Evaluation, which also provides expert advice on planned testing and assessment.

The NBIS Program Management Office also oversees the maintenance of legacy personnel vetting systems previously owned by OPM and the replacement of DOD legacy personnel vetting systems. The OPM legacy systems reside on OPM's network, but are maintained by DOD personnel until those legacy systems are replaced by the NBIS system. <sup>22</sup> DOD spent around \$835 million to maintain these legacy systems from fiscal years 2020 through 2022. DOD plans to continue to fund the maintenance of OPM and DOD legacy systems for personnel vetting through fiscal year 2024. <sup>23</sup> DCSA plans to maintain all legacy systems

<sup>&</sup>lt;sup>20</sup>Of this total amount for the NBIS program, DISA spent \$430 million from fiscal years 2017 through 2020; and DCSA spent \$223.5 million from fiscal years 2021 through 2022.

<sup>&</sup>lt;sup>21</sup>According to DOD officials, the top five contracts for NBIS development during fiscal years 2021 and 2022 were awarded to several industry organizations, including Perspecta, Soliel, and Kapili. Additionally, DOD's Joint Interoperability and Testing Command carried out NBIS work for DCSA under a military interdepartmental purchase request, which DOD uses to obtain services from and provide services to agencies.

<sup>&</sup>lt;sup>22</sup>OPM transferred ownership of legacy IT systems to DCSA in October 2020. Under a series of interagency agreements, DCSA pays OPM for services associated with the transfer of these legacy systems until they are replaced by the NBIS system.

<sup>&</sup>lt;sup>23</sup>Legacy DOD systems include the Defense Information System for Security (DISS) and Mirador. DISS is the system of record for personnel security, suitability, and credential management. Mirador is the DOD system of record for continuous vetting.

until the federal government and industry are using NBIS and all data on those systems are replaced by NBIS.

### DOD Has Developed Some NBIS System Capabilities, but Lacks a Reliable Schedule and Cost Estimate for the NBIS Program

DOD has delivered some NBIS system capabilities, but continued delays hinder progress. Additionally, DCSA continues to lack a reliable implementation schedule for the NBIS program and has not resolved our previously identified schedule weaknesses.<sup>24</sup> Moreover, the NBIS program's cost estimate is not reliable, and DCSA may be unable to accurately project NBIS program costs, according to our analysis.

DOD Has Developed and Deployed Some NBIS System Capabilities, but Delayed Milestones Have Hindered Progress

NBIS System Status

The NBIS Program Management Office has deployed various NBIS system capabilities, such as the eApplication (eApp). The status of NBIS system deployment across each personnel vetting phase is described below.

**Initiation.** Most federal agencies and industry will use the NBIS eApplication (eApp) for personnel to complete the forms necessary to initiate the personnel vetting process. According to program documentation, eApp is fully deployed and 86 federal agencies had processed at least one application as of April 2023.<sup>25</sup> DCSA expects most

<sup>&</sup>lt;sup>24</sup>GAO-22-104093.

<sup>&</sup>lt;sup>25</sup>According to NBIS program documentation, full deployment means the delivery of approved and complete code for all capabilities, legacy data are in place to support the capability, and all end users/customers are able to access NBIS.

agencies to fully use eApp and no longer process personnel data through the legacy e-QIP system by September 2023.<sup>26</sup>

**Background investigation.** DCSA will be responsible for providing background investigation services on behalf of most federal agencies using NBIS.<sup>27</sup> The NBIS program has delivered a position designation tool that assesses the duties and responsibilities of individual positions in order to determine the level of investigation required.<sup>28</sup> The program plans to fully deploy background investigation capabilities by March 2024, but also plans to provide additional capabilities through March 2025 to support the federal government's transition from a five-tiered model of investigations to a three-tiered model.<sup>29</sup>

**Adjudication and subject management.** All federal departments and agencies that will use NBIS are expected to record the result of adjudications in the NBIS data repository, according to the PAC's Trusted

<sup>&</sup>lt;sup>26</sup>As of April 2023, federal agencies had submitted through eApp about 4 percent of the average number of background investigation applications processed each year in the federal government. The Electronic Questionnaires for Investigations Processing (e-QIP) is a web-based automated system that was designed to facilitate the processing of standard investigative forms used by DCSA and other investigation service providers conducting background investigations for federal security, suitability, fitness, and credentialing purposes.

<sup>&</sup>lt;sup>27</sup>As mentioned above, according to ODNI, some executive branch agencies have the authority to conduct all or some of their own investigations.

<sup>&</sup>lt;sup>28</sup>According to NBIS documentation, the NBIS position designation tool is intended to meet requirements outlined in parts 731 and 1400 of title 5, Code of Federal Regulations, and positions are displayed in the application in accordance with OPM and ODNI's Position Designation System.

<sup>&</sup>lt;sup>29</sup>The 2012 *Federal Investigative Standards* established requirements for conducting five tiers of background investigations that provide information to enable security, suitability or fitness, and credentialing vetting determinations. The PAC plans to reduce the number of background investigation tiers from five to three: Low Tier for low-risk non-sensitive positions and physical or logical access or credentialing determinations; Moderate Tier for moderate-risk public trust and noncritical sensitive positions and granting eligibility and access to classified information at the confidential or secret level, or L access; and High Tier for high-risk public trust and critical or special sensitive positions and granting eligibility and access to classified information at the top-secret level, access to sensitive compartmented information, or Q access. DNI and Director, OPM, *Federal Personnel Vetting Investigative Standards* (May 17, 2022).

Workforce 2.0 implementation strategy.<sup>30</sup> As of February 2023, the NBIS program had developed this repository and a limited adjudicative capability. However, according to OPM officials, this capability is not yet consistent with federal suitability guidance. The NBIS program plans to fully deploy adjudication capabilities by the third quarter of fiscal year 2023, including a subject management portal that would enable agencies to track ongoing case activities of individuals subject to personnel vetting, send visit requests, initiate incident reports, or respond to adjudication activities.

**Continuous vetting.** All federal agencies have enrolled their eligible populations in a continuous vetting service to meet current Trusted Workforce guidance.<sup>31</sup> Continuous vetting is currently enabled by legacy DOD and ODNI systems.<sup>32</sup> In 2021, the NBIS program delivered initial capabilities for processing information from classified systems for continuous vetting and plans to transition all customers from legacy systems to a fully deployed capability within NBIS by December 2023.

While progress has been made since 2016, the NBIS program has encountered funding and policy changes and missed milestones that have delayed progress toward full implementation of NBIS capabilities. Figure 3 depicts the status of NBIS system development milestones and delays as of February 2023.

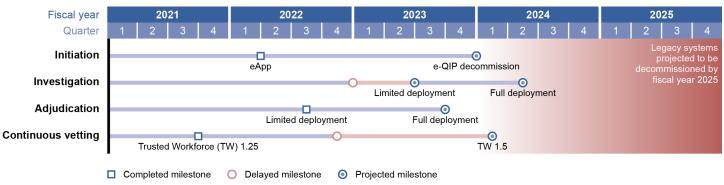
**NBIS** Delays

<sup>&</sup>lt;sup>30</sup>Security, Suitability, and Credentialing Performance Accountability Council, *Trusted Workforce 2.0 Implementation* Strategy (March 2023). An adjudication is the evaluation of pertinent data in a background investigation, as well as any other available information that is relevant and reliable, to determine whether an individual is eligible for access to classified information; eligible to hold a sensitive position; suitable for government employment; fit to perform work for or on behalf of the government as a federal employee or contractor; or eligible for logical and physical access. Exec. Order No. 13,467, § 1.3(a), as amended through Exec. Order No. 13,869, 84 Fed. Reg. 18,125, 18,125-29 (Apr. 24, 2019).

<sup>&</sup>lt;sup>31</sup>DNI and Director, OPM Memorandum, *Transforming Federal Personnel Vetting:* Continuous Vetting and Other Measures to Expedite Reform and Transition to Trusted Workforce 2.0 (Jan. 15, 2021).

<sup>&</sup>lt;sup>32</sup>See GAO-22-104093. The two major systems used for continuous vetting are DCSA's Mirador and ODNI's Continuous Evaluation System. The two systems obtain data from different sources within the required record check categories. According to officials, ODNI's Continuous Evaluation system resides on a classified network and includes checks in all data categories required for Trusted Workforce 1.5. When a record check results in an alert for an individual, the Continuous Evaluation system sends information to agencies to adjudicate.

Figure 3: National Background Investigation Services (NBIS) System Development Milestones by Personnel Vetting Phase as of February 2023



Source: GAO analysis of NBIS program information. | GAO-23-105670

Note: The eApplication (eApp) is the portion of the NBIS system that contains the investigative standard forms that most federal applicants and employees use to provide the necessary information to process their personnel background investigations. eApp will replace the functionality currently provided by the Electronic Questionnaires for Investigations Processing (e-QIP).

Under DISA management, DOD expected to provide initial NBIS capabilities covering the full investigative process sometime in the fourth quarter of 2018 and reach full operational capability in 2019. In March 2020, NBIS officials determined that these timeframes were unrealistic; they conducted an analysis to rebaseline the program's schedule and projected operational deployment of all capabilities in fiscal year 2023. NBIS officials continued to use this rebaselined schedule as the program management transitioned from DISA to DCSA in October 2020.<sup>33</sup> However, we reviewed this rebaselined schedule and found that it was unreliable, and recommended in 2021 that DOD revise it to meet GAO best practices for scheduling.<sup>34</sup> DOD concurred with our recommendation.

After the NBIS program transitioned to DCSA, the program has continued to miss milestone dates for the delivery of capabilities. According to program officials, external circumstances impacted capability development in 2020 and 2021, including a funding shortfall and the PAC

<sup>&</sup>lt;sup>33</sup>DCSA officials refer to this revision of the NBIS program's milestones as rebaselining. A program's baseline schedule is used to manage the program scope, the time period for accomplishing it, and the required resources. Rebaselining can occur if management concludes that the remaining schedule target for completing a program is insufficient and that the current baseline is no longer valid for realistic performance measurement. See GAO-16-89G.

<sup>34</sup>GAO-22-104093.

issuing new Trusted Workforce policies that shifted the NBIS program's development schedule to prioritize continuous vetting ahead of delivering background investigation capabilities. For example, NBIS program planning documents in July 2021 showed that the program would release all of the software to enable the new Trusted Workforce 2.0 requirements for continuous vetting by February 2022, but it then revised full implementation to August 2022 and again later to December 2023.<sup>35</sup> The NBIS program also shifted its milestone for the deployment of background investigation capabilities to begin transitioning away from legacy systems from September 2022 to March 2024. For NBIS to reach full implementation, federal agencies and industry organizations must also adopt and scale the use of deployed capabilities within their own organizations.<sup>36</sup>

According to NBIS program documentation, decommissioning legacy IT systems currently used for personnel vetting is dependent on the deployment of NBIS system capabilities.<sup>37</sup> First, all agencies and industry must be transitioned off of the legacy systems that are currently being used for personnel vetting and use NBIS capabilities instead. Second, any data remaining on those legacy systems needs to be transferred to NBIS. Finally, DCSA will decommission legacy systems in stages until they are finally shut off, which DCSA officials plan to complete by the end of 2024.

<sup>&</sup>lt;sup>35</sup>A software release is a segment of requirements that deploys needed capabilities. See GAO-20-590G. According to NBIS program officials, they meet NBIS release dates "on time" even if all planned requirements for a capability are not complete, since any issues or enhancements can be addressed after a release. In government settings, the working product at the end of a release may go to a certifier or independent test organization rather than directly to the end user.

<sup>&</sup>lt;sup>36</sup>According to NBIS program documentation, scaling is the process where an agency/organization expands use of the system to the entire user base.

<sup>&</sup>lt;sup>37</sup>These systems include both legacy OPM (e.g. e-QIP, Central Verification System, Personnel Investigation Processing System) and legacy DOD systems (e.g. Defense Information System for Security, Mirador).

DCSA Continues to Lack a Reliable Schedule for NBIS and Has Not Resolved Previously Identified Schedule Weaknesses DCSA continues to lack a reliable schedule for NBIS implementation and has not resolved weaknesses we identified in 2021. While DCSA concurred with our recommendation to revise the NBIS program schedule to meet all characteristics of a reliable schedule as defined by GAO's best practices for schedules, it had not implemented that recommendation as of February 2023. As a result, the NBIS Program Management Office continues to have an unreliable schedule to manage the program.

Specifically, we assessed the current NBIS program schedule as minimally meeting the characteristics of comprehensive, controlled, credible, and well-constructed (see table 1).<sup>38</sup> A schedule needs to substantially or fully meet all of these characteristics to be considered reliable.

Table 1: GAO Assessment of the National Background Investigation Services (NBIS) Program Schedule against Characteristics of a Reliable Schedule

Best practice characteristic	Characteristic description <sup>a</sup>	Assessment
Comprehensive	A comprehensive schedule includes all the activities necessary to accomplish a program's objectives. The schedule includes resources such as labor, materials, travel, facilities, and equipment and depicts when those resources are needed and when they will be available. It realistically reflects how long each activity will take and allows for discrete progress measurement.	Minimally met
Controlled	A schedule is controlled if trained schedulers update it regularly using actual progress and logic to realistically forecast dates for program activities. The current schedule is compared against a designated baseline schedule to measure, monitor, and report the program's progress. <sup>b</sup>	Minimally met
Credible	A schedule is credible if it reflects the order of events necessary to achieve outcomes, activities are traceable to one another, and the key dates presented to management in periodic briefings are in sync with the schedule. Data about risks are also used to predict a level of confidence in meeting the program's completion date.	
Well-constructed A schedule is well-constructed if all its activities are logically sequenced with the most straightforward logic possible. The schedule's critical path <sup>c</sup> represents a true model of the activities that drive the program's earliest completion date, and total float accurately depicts schedule flexibility. <sup>d</sup>		Minimally met

Source: GAO analysis of Department of Defense information. | GAO-23-105670

<sup>&</sup>lt;sup>38</sup>For the ratings described here, "minimally met" means the program provided evidence that satisfies a small portion of the criterion. "Partially met" means the program provided evidence that satisfies about half of the criterion. "Substantially met" means the program provided evidence that satisfies a large portion of the criterion. "Fully met" means the program provided complete evidence that satisfies the entire criterion. A schedule is considered reliable if the assessment ratings for each of the four characteristics are substantially met or fully met. If any of the characteristics are rated as not met, minimally met, or partially met, then the schedule cannot be considered reliable.

<sup>a</sup>GAO, Schedule Assessment Guide: Best Practices for Project Schedules, GAO-16-89G (Washington, D.C.: Dec. 22, 2015).

For our review of the 2022 NBIS program schedule, we assessed the nine available subproject schedule files contributing to the NBIS integrated master schedule against best practices for developing and maintaining reliable program schedules, which are defined in GAO's *Schedule Assessment Guide* and *Agile Assessment Guide*. <sup>39</sup> We averaged the ratings for each best practice across the nine subproject files to determine the overall rating for each of the four characteristics. In contrast to our first review of the NBIS schedule as of 2020, the NBIS program schedule in 2022 consisted of separate files for the NBIS program's subproject teams instead of a single file for activities related to software development. <sup>40</sup> We provide a table summarizing our full assessment of the best practices in appendix II.

NBIS program officials stated in a corrective action plan in June 2022 that they had revised the integrated master schedule by incorporating several best practices in accordance with our 2021 recommendation. However, we determined that the NBIS program had not met any of our best practices and that the overall quality of the schedule as of February 2023 had not improved. It is thus still not reliable to use for decision-making.

Furthermore, the extent to which program management was prioritizing schedule development or basing decisions based on the nine separate schedule files we reviewed was unclear. NBIS program officials told us

<sup>&</sup>lt;sup>b</sup>A baseline schedule represents the original configuration of the program plan and signifies the consensus of all stakeholders regarding the required sequence of events, resource assignments, and acceptable dates for key deliverables.

<sup>&</sup>lt;sup>c</sup>The critical path is the longest continuous sequence of activities in a schedule.

<sup>&</sup>lt;sup>d</sup>Total float is the amount of time an activity can be delayed or extended before the delay affects the program's finish date.

<sup>&</sup>lt;sup>39</sup>See GAO, *Schedule Assessment Guide: Best Practices for Project Schedules*, GAO-16-89G (Washington, D.C.: Dec. 22, 2015) and *Agile Assessment Guide: Best Practices for Agile Adoption and Implementation*, GAO-20-590G (Washington, D.C.: Sept. 28, 2020).

<sup>&</sup>lt;sup>40</sup>The NBIS program includes nine subprojects that reflect the range of program activities: acquisition, contracts, cyber, engineering, finance, government onboarding, industry onboarding, technical release, and training. According to NBIS officials, each subproject has a team lead who approves the schedule for their subproject prior to submitting it for consolidation into a single NBIS program file. We reviewed all nine subproject schedule files. As of February 2023, NBIS officials said that they did not yet have a single, consolidated schedule file for the program.

that the benefit of using a schedule needs to outweigh the effort to implement it, and that integrating all of the current schedules together would take resources away from the development effort. After reviewing our analysis, officials stated that their focus is on delivering operational capability and that onerous, non-critical, administrative burdens are a secondary priority for the program. However, the NBIS program is already using resources to develop its schedule by employing a scheduler and tasking NBIS subproject teams to follow scheduling best practices on their own. According to the GAO *Agile Assessment Guide*, schedules for software programs should contain enough detail so that schedule updates are not overly frequent or cumbersome.<sup>41</sup>

NBIS program officials further stated that the current NBIS schedule follows DOD's guidance on the software acquisition pathway, which prescribes procedures for the efficient and effective acquisition, development, integration, and timely delivery of secure software. <sup>42</sup> This guidance states that, for programs using the software acquisition pathway, new capabilities will be delivered to operations at least annually to iteratively meet requirements, but more frequent updates and deliveries are encouraged where practical. However, it does not otherwise detail how DOD software programs are to develop and maintain a schedule, as is the case with GAO's *Schedule Assessment Guide* and *Agile Assessment Guide*.

DCSA officials acknowledged areas where they could improve NBIS scheduling practices after our initial assessment in 2020 and our recommendation to improve the reliability of the schedule, but have not made progress since that time. The lack of progress in addressing weaknesses in the NBIS program's schedule could further delay the implementation of Trusted Workforce 2.0 reforms and the planned replacement of legacy personnel vetting systems in 2024. By directing DCSA to implement our best practices for program schedules, Congress would have greater assurance that the NBIS program is well positioned to meet its development milestones going forward.

### The NBIS Cost Estimate Is Not Reliable

The NBIS program's cost estimate is also not reliable and, therefore, DCSA may be unable to effectively project NBIS costs. We reviewed the most recent cost estimate available from March 2022, which estimates

<sup>&</sup>lt;sup>41</sup>See GAO-20-590G.

<sup>&</sup>lt;sup>42</sup>DOD Instruction 5000.87, *Operation of the Software Acquisition Pathway* (Oct. 2, 2020).

total NBIS costs from fiscal years 2023–2027 to be \$767.9 million. We compared this estimate against 18 best practices for developing and maintaining reliable cost estimates as defined in GAO's *Cost Estimating and Assessment Guide*. <sup>43</sup> We summarized these best practices into four characteristics of a reliable cost estimate: accurate, comprehensive, credible, and well-documented. We took the average of our ratings for each best practice to determine the overall rating for each of the four characteristics.

According to our analysis, this cost estimate is minimally accurate, minimally comprehensive, not credible, and minimally well-documented (see table 2 below).<sup>44</sup> A cost estimate is considered reliable if the overall assessment ratings for each of the four characteristics of a high-quality estimate are substantially or fully met. These characteristics also apply to Agile programs, which have dynamic and iterative processes and spread planning activities throughout the program's duration.<sup>45</sup> We provide a table with examples from our full assessment of the best practices in appendix III.

<sup>&</sup>lt;sup>43</sup>GAO, Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs, GAO-20-195G (Washington, D.C.: Mar. 12, 2020).

<sup>&</sup>lt;sup>44</sup>For the ratings described here, "minimally met" means the program provided evidence that satisfies a small portion of the criterion. "Partially met" means the program provided evidence that satisfies about half of the criterion. "Substantially met" means the program provided evidence that satisfies a large portion of the criterion. "Fully met" means the program provided complete evidence that satisfies the entire criterion. A cost estimate is considered reliable if the assessment ratings for each of the four characteristics are substantially met or fully met. If any of the characteristic ratings is not met, minimally met, or partially met, then the cost estimate cannot be considered reliable.

<sup>&</sup>lt;sup>45</sup>See GAO-20-590G.

Table 2: Assessment of the Defense Counterintelligence and Security Agency's (DCSA) Cost Estimate for the National Background Investigation Services (NBIS) Program Compared with Best Practices

Best practice characteristic	Characteristic description <sup>a</sup>	Assessment
Accurate	Accurate cost estimates are developed by estimating each cost element using the best methodology from the data collected, including appropriate adjustments for inflation and actual experiences from comparable programs, and updating the estimate regularly to reflect significant changes in the program.	Minimally met
Comprehensive	A comprehensive cost estimate completely defines the program and reflects the current schedule and requirements for the program. Where information is limited and judgments must be made, the assumptions and exclusions on which the estimate is based are reasonable, clearly identified, explained, and documented.	Minimally met
Credible	A credible cost estimate documents any limitations of the analysis including risk and uncertainty analysis that determines the level of confidence associated with the estimate. In addition, high-value cost elements are cross-checked with alternative estimating methodologies to validate results. Finally, the estimate is compared with an independent cost estimate conducted by an external organization.	Not met
Well-documented	A well-documented A well-documented cost estimate can be easily repeated or updated and can be traced to original sources through auditing. Adequate documentation also enables decision-makers to better defend program funding.	

Source: GAO analysis of Department of Defense information. | GAO-23-105670

<sup>a</sup>GAO, Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs, GAO-20-195G (Washington, D.C.: Mar. 12, 2020).

NBIS program officials noted that cost estimating has been challenging and provided several reasons why the cost estimate they had developed did not meet our best practices. First, program officials stated that DOD guidance for software development programs does not require certain kinds of documentation, such as an independent cost estimate. For example, officials stated that Office of the Secretary of Defense executive leadership determined that an independent cost estimate was not required for the NBIS program, and that DOD Instruction 5000.87 relieves a DOD software acquisition pathway program of some traditional major acquisition requirements.<sup>46</sup> However, conducting an independent cost estimate is one of GAO's best practices for cost estimating. Without an

<sup>&</sup>lt;sup>46</sup>See generally DOD Instruction 5000.87, *Operation of the Software Acquisition Pathway* (Oct. 2, 2020).

independent cost estimate, decision-makers may lack certain insights into a program's potential costs.<sup>47</sup>

Second, NBIS program officials stated that strict adherence to each of our best practices would require significant redirection of time and resources and would result in major delays to the delivery of capabilities. However, we found that the NBIS program had already invested staff time and resources to developing cost-estimate documents and is required by DOD guidance to update its initial cost estimate annually.<sup>48</sup>

Lastly, NBIS officials added that the program has successfully managed the budget since 2020 without significantly going over or under budget. The absence of significant cost overruns in the past, however, is not a reason to avoid developing a reliable cost estimate. Projecting future costs is important with software programs because they generally do not know enough at the start about the exact requirements and functionality that will be needed as the program evolves. Moreover, NBIS program documentation states that development is based on the funding available and that any cost shortfalls are resolved by prioritizing requirements or delaying scheduled activities. It is thus unclear how the program is actually using the estimate to successfully manage its budget.

DOD has spent more than a half billion dollars to develop and deploy NBIS since 2016. It is now especially critical for the program to have a reliable cost estimate as NBIS moves toward full deployment by fiscal year 2024 and DCSA begins to rely on the system to provide services to the rest of the government.<sup>49</sup> Requiring DCSA to implement our best practices for cost estimating for NBIS would help Congress better ensure that the agency is collecting the data necessary to prevent cost increases and delays in delivering services through NBIS that are necessary to implement Trusted Workforce 2.0.

<sup>&</sup>lt;sup>47</sup>We also have previously described how, under our *Agile Assessment Guide*, it is a common myth that Agile does not require documentation. See Appendix VI on "Debunking Agile Myths" in GAO-20-590G.

<sup>&</sup>lt;sup>48</sup>DOD Instruction 5000.87, Operation of the Software Acquisition Pathway (Oct. 2, 2020).

<sup>&</sup>lt;sup>49</sup>According to DCSA, starting in fiscal year 2024, it intends to use its working capital fund to finance the NBIS program as well as its products (e.g. background investigations) and services (e.g. continuous vetting). Working capital funds operate as self-supporting entities that conduct a regular cycle of businesslike activities. They function from the fees charged for goods and services provided to customers, such as other DOD components or federal agencies.

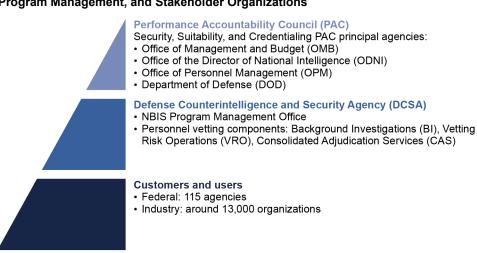
Stakeholders
Reported Being
Generally Satisfied
with NBIS System
Development, but
Identified Some
Concerns

DCSA has worked with stakeholders throughout the development of the NBIS system and has completed initial engagement with federal agencies. Federal and industry stakeholders that responded to our survey were generally satisfied with DCSA's engagement with them, initial training, and opportunities to provide feedback, but also noted some concerns related to those areas as well as with transitioning to the NBIS system.

DCSA Has Identified and Almost Completed Initial Engagement with NBIS Stakeholders

DCSA defines stakeholders as entities that will require access to NBIS system features or capabilities to support their personnel vetting operations, excluding applicants. These include DCSA components, other federal agencies, industry organizations, and oversight bodies such as the PAC Principal agencies, as shown below in figure 4. DCSA officials stated that internal stakeholders include DCSA components such as its Vetting Risk Operations, Consolidated Adjudication Services, and Background Investigations. DCSA defines external stakeholders broadly as the 115 federal agencies and around 13,000 industry organizations who will eventually need to work with the NBIS system. According to DCSA officials, the stakeholders that they consider to be key to NBIS development include their internal stakeholders, members of an NBIS industry working group, and the military departments. The PAC Principal agencies are also key stakeholders.

Figure 4: National Background Investigation Services (NBIS) Program Oversight, Program Management, and Stakeholder Organizations



Source: GAO analysis of DOD information. | GAO-23-105670

As of February 2023, DCSA had completed its process of providing initial access to the NBIS system to 101 federal agencies and over 2,100 industry organizations—a process it calls onboarding. During the onboarding process, stakeholder organizations designate one central point of contact for their organization and create a small team of subject matter experts to establish the organization's hierarchy and workflow in the NBIS system. Once onboarding is complete, the stakeholder's central contact and team add additional NBIS users and expand the use of NBIS throughout their organization, which DCSA refers to as scaling.

External Stakeholders
Were Generally Satisfied
with DCSA Engagement
Regarding the NBIS
System, but Noted Some
Concerns in Our Survey

DCSA has participated in or led a number of outreach activities with its stakeholders across the federal government and industry about the NBIS system since it took over development in 2020. The majority of external stakeholders we surveyed said they are generally satisfied with DCSA in areas such as stakeholder engagement, the initial training they received on eApp, and opportunities to provide feedback on the NBIS system. <sup>50</sup> However, the external stakeholders also noted some concerns related to these areas that could impact their preparedness for successfully rolling out and using the NBIS system in their organizations, such as limited training sessions and materials; delayed DCSA responsiveness to feedback; the resources and time required to transition to the use of the NBIS system; and overall NBIS system readiness.

DCSA Stakeholder Engagement Activities DCSA stakeholder engagement activities include outreach to stakeholders such as briefings at various working groups, presentations at conferences, and "demo days" that are virtual demonstrations of aspects of the NBIS system for online participants, according to DCSA documentation and interviews with DCSA officials. DCSA also conducts outreach to stakeholders to elicit feedback and information about what stakeholders need the NBIS system to do to support their personnel vetting missions. Additionally, DCSA engages with stakeholders in ways that are specific to the onboarding process, such as onboarding training and conducting a survey of user experiences with eApp.

<sup>&</sup>lt;sup>50</sup>In November 2022, we completed a survey of the 71 external NBIS stakeholders, including federal agencies and industry organizations, that DCSA reported had completed onboarding as of August 2022 when we finalized the survey development. We received completed survey responses from 61 of the 71 external NBIS stakeholders. We define the quantifier "majority" as over half of the external stakeholders that responded to our survey.

Most stakeholders reported that they had received information and outreach from DCSA staff on the NBIS system. According to our survey results:

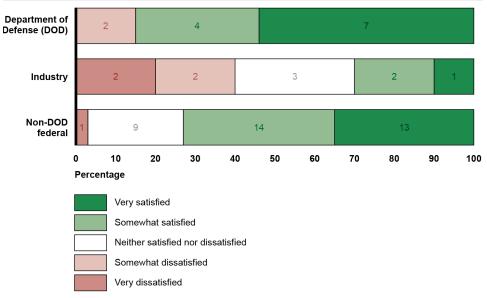
- Almost 92 percent (55 of 60) of external stakeholders that responded to our survey said they had engaged with the team who reached out to them about the NBIS system, and around 92 percent (47 of 51) of that group found that outreach to be useful.<sup>51</sup>
- Over 66 percent of external stakeholders that responded to our survey said they were satisfied with both the quality (41 of 60) and the frequency (40 of 60) of DCSA communication regarding the NBIS system, as shown in figures 5 and 6 below.<sup>52</sup> In their responses to our open-ended questions, 10 external stakeholders specifically noted positive experiences with DCSA's communication about the NBIS system. For example, one external stakeholder said that regular and active communication with the NBIS team provided an avenue for expressing concerns and identifying possible solutions. The stakeholders' level of satisfaction varied by entity type, (i.e., DOD, non-DOD federal, and industry organizations). Specifically, more DOD and non-DOD federal stakeholders reported being satisfied with the quality and frequency of DCSA's communication than industry stakeholders.

<sup>&</sup>lt;sup>51</sup>We present the survey results as the percentage and number of respondents out of the total number of respondents who responded to each question. In some cases, survey respondents selected "no response", saw the question but did not respond to it, or did not see the question due to skip patterns within the survey.

<sup>&</sup>lt;sup>52</sup>Throughout the discussion of the survey results, "satisfied" includes stakeholders who responded that they were "very satisfied" or "somewhat satisfied"; and "dissatisfied" includes stakeholders who responded that they were "very dissatisfied" or "somewhat dissatisfied".

Figure 5: GAO Survey Results on National Background Investigation Services (NBIS) Stakeholder Satisfaction with Quality of Defense Counterintelligence and Security Agency (DCSA) Communication

How satisfied or dissatisfied are you with DCSA regarding NBIS in the following areas: Quality of communication on NBIS?

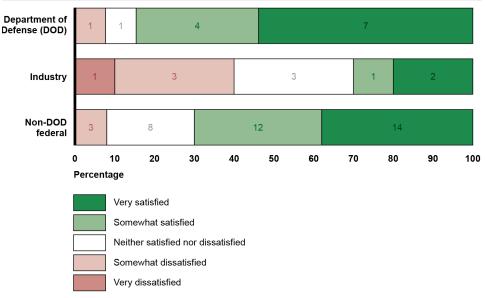


Source: GAO analysis of survey results. | GAO-23-105670

Note: The number of actual respondents is included within the colored bars. The size of each bar represents these numbers as a percentage of all respondents for that organization type.

Figure 6: GAO Survey Results on National Background Investigation Services (NBIS) Stakeholder Satisfaction with Frequency of Defense Counterintelligence and Security Agency (DCSA) Communication

How satisfied or dissatisfied are you with DCSA regarding NBIS in the following areas: Frequency of communication on NBIS?



Source: GAO analysis of survey results. | GAO-23-105670

Note: The number of actual respondents is included within the colored bars. The size of each bar represents these numbers as a percentage of all respondents for that organization type.

In their responses to our open-ended questions, 38 stakeholders praised the efforts of DCSA staff, including those in charge of the help desk, DCSA liaisons, and the NBIS team. For example, in response to an open-ended question, one external stakeholder said that the NBIS planning and deployment team was helpful in assisting the stakeholder's staff with training and had gone "above and beyond" to assist the stakeholder with scaling. This stakeholder noted that the team was "a pleasure to work with and very professional." Both DOD and non-DOD federal stakeholders that responded to our survey gave more praise to DCSA staff than industry stakeholders.

Training Opportunities and Preparedness

During the onboarding process, DCSA is employing a "train-the-trainer" model with its NBIS stakeholders. As part of the train-the-trainer model, the organization's central point of contact and a small team of subject matter experts receive initial training from DCSA and are then responsible for conducting initial training on the NBIS system within their organization. DCSA provides other training on the NBIS system, including webinars,

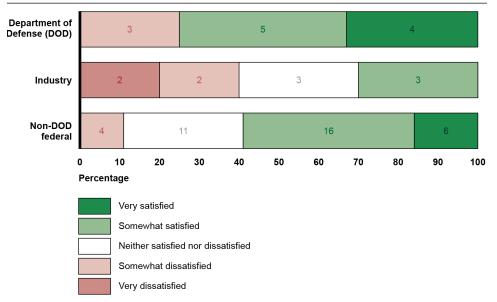
learning labs, eLearning, video shorts, recorded and live events, and training materials such as job aids and knowledge articles. As of February 2023, DCSA had delivered initial training on case initiation to 101 of 115 external federal stakeholders. However, training efforts on continuous vetting were delayed, with only 6 of 115 external federal stakeholders having completed this training. According to DCSA officials, as DCSA continues to roll out NBIS system capabilities incrementally, DCSA will release additional training materials and events tied to specific capabilities.

The majority of stakeholders we surveyed said they were satisfied with their initial training but noted some concerns related to training and their preparedness to train their organizations. According to the survey results:

Almost 58 percent (34 of 59) of external stakeholders that responded to our survey said they were satisfied with the training they received on eApp, as shown in figure 7. For example, in an open-ended response, one stakeholder said they found the initial training and training library to be well done. However, in their responses to our open-ended survey questions, 24 stakeholders noted concerns with training or identified ways in which training, training materials, and demonstrations could be improved. Specifically, 13 of the 24 stakeholders referred to issues with NBIS training sessions. For example, one external stakeholder said they found the training to be too limited and were concerned that the "train-the-trainer" model used by DCSA is confusing and not beneficial. Eleven stakeholders noted concerns with the training materials, including that they could be hard to understand or were not useful. Stakeholders' satisfaction varied by entity type. Specifically, industry stakeholders that responded to our survey were more dissatisfied with eApp training than DOD and non-DOD federal agencies.

Figure 7: GAO Survey Results on National Background Investigation Services (NBIS) Stakeholder Satisfaction with NBIS eApplication (eApp) Training

How satisfied or dissatisfied are you with the onboarding process in the following areas: eApp training



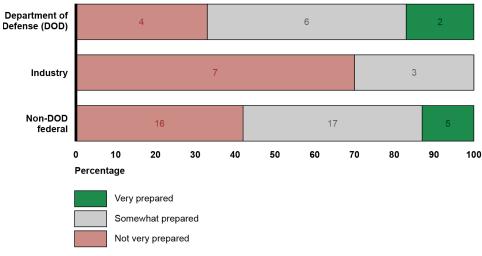
Source: GAO analysis of survey results. | GAO-23-105670

Note: The number of actual respondents is included within the colored bars. The size of each bar represents these numbers as a percentage of all respondents for that organization type.

Almost 67 percent (40 of 60) of all external stakeholders that
responded to our survey said they feel prepared to train their
organization to use eApp. Moreover, around 55 percent (33 of 60) of
them said they feel somewhat or very prepared to train their
organizations to use future NBIS system capabilities, as shown in
figure 8. However, perceived preparedness varied by stakeholder
type, with a larger percentage of industry stakeholders reporting low
levels of preparedness (7 of 10).

Figure 8: GAO Survey Results on National Background Investigation Services (NBIS) Stakeholder Preparedness Levels for Training on Future NBIS System Capabilities

How prepared do you feel to train your organization to use future NBIS capabilities (e.g. adjudication, background investigation services) once they are available?



Source: GAO analysis of survey results. | GAO-23-105670

Note: The number of actual respondents is included within the colored bars. The size of each bar represents these numbers as a percentage of all respondents for that organization type.

Responsiveness to Stakeholder Feedback on the NBIS System Around 68 percent (41 of 60) of external stakeholders that responded to our survey said they were satisfied with the opportunities they were given to provide feedback on the NBIS system, and around 69 percent (40 of 58) said they had given such feedback. However, only 18 of the 40 that reported providing feedback said that most or all of their feedback had been acknowledged by DCSA. For example, in response to an openended question, one stakeholder stated that their organization had provided DCSA feedback on their needs and concerns pertaining to the NBIS system multiple times and was still waiting for a response to some of their questions. Industry stakeholders were less satisfied with opportunities to provide feedback on NBIS. Forty percent (4 of 10) of industry stakeholders said they were dissatisfied with feedback opportunities, compared with roughly 8 percent (1 of 13) of DOD and 14 percent (5 of 37) of non-DOD federal stakeholders.

Process to Transition to NBIS System Use

In their responses to our open-ended survey questions, 29 external stakeholders indicated that they had concerns related to one or more elements of the process to fully transition to using the NBIS system within their organizations. Their concerns included the resources that will be

required, use of both the NBIS and legacy systems while transitioning to the NBIS system, and DCSA's expectations and goals regarding the transition.<sup>53</sup> Specifically:

- In responses to our open-ended survey questions, 14 external stakeholders, including some of the largest federal stakeholders, said they were concerned with the organizational resources—time and personnel—they will need to dedicate to fully deploy the NBIS system.<sup>54</sup> In addition, eight external stakeholders—including large stakeholders—expressed concerns with using both the NBIS and legacy systems simultaneously, which they said can cause delays in processing applications.
- In responses to our open-ended survey questions, 10 external stakeholders noted that they found the NBIS program milestones to be unrealistic, and they thought the status of NBIS system progress had been exaggerated. For example, according to one external stakeholder, "The way NBIS has been communicated is what they hope it to be, not what it is, or even worse an exaggerated version of events." Another stakeholder stated that they believe DCSA has been tasked with rolling out a system prematurely in order to meet milestones that are unrealistic. For survey respondents who commented on the process to transition to NBIS, their views were generally consistent across entity type.

NBIS System Readiness

Fourteen external stakeholders said in their open-ended responses that they do not believe the NBIS system is ready to be rolled out to stakeholders. One external stakeholder stated that the NBIS program has not delivered the stated capability and has had a hard time getting systems up and running. According to another external stakeholder, "The idea of NBIS is a step forward for the enterprise, but the method in which it was created, the lack of transparency and communication, and the

<sup>&</sup>lt;sup>53</sup>Open-ended survey questions provided an opportunity for respondents to share additional thoughts about topics they wanted to raise. Not all respondents shared thoughts about each theme below; therefore, these themes are not representative of all survey respondents.

<sup>&</sup>lt;sup>54</sup>To determine the relative size of an external federal NBIS stakeholder, we reviewed the number of fiscal year 2019 e-QIP initiations by each organization within our survey population. We identified agencies that had initiated 10,000 or more as large stakeholders. The 13 largest agencies in our survey population accounted for about 97 percent of the total number of initial applications in e-QIP for fiscal year 2019.

forceful onboarding process has left us with a product that is cumbersome, inefficient, and subpar to the ultimate goal."

In addition, 11 external stakeholders said they thought the timeline for deploying the NBIS system is too rushed. One external stakeholder stated, "Just because [it got] done faster does not mean the system is ready. [NBIS] development has been rushed." Others noted an impression that the NBIS program was more focused on meeting deadlines than getting the system to function well. The 14 stakeholders that commented negatively on system readiness were comprised mostly of non-DOD federal (8) and industry (4) stakeholders.

While there were no stakeholders that commented positively on NBIS system readiness, 13 stakeholders made positive comments related to the anticipated utility of the NBIS system. For example, one stakeholder said that they anticipate the NBIS system will streamline the background investigation process.

Opportunities Exist to Inform DCSA's Stakeholder Engagement Efforts Standards for Internal Control in the Federal Government stresses the importance of using data and information to make informed decisions and evaluate the organization's performance in achieving key objectives. 55 Further, according to the GAO Agile Assessment Guide, data from sources such as periodic surveys or questionnaires can help Agile programs understand stakeholder needs and monitor the value of the work accomplished. We describe other processes that the program uses to engage stakeholders and how these align with GAO's Agile Assessment Guide in appendix IV.

In discussing our survey results, DCSA officials said that the adoption of the NBIS system is dependent on the willingness of external organizations to engage in implementation. We agree that an effective adoption and implementation requires a coordinated and concerted effort across organizations. DCSA officials acknowledged that while they had solicited and received feedback on NBIS system implementation as previously discussed, the stakeholder views obtained through our survey provide different and additional information than what they had previously received from stakeholders. DCSA has also not conducted its own survey regarding stakeholders' experiences with implementing the NBIS system. The program may thus benefit from assessing and using our survey

<sup>&</sup>lt;sup>55</sup>See GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: Sept. 2014).

results (summarized above and provided in more detail in appendixes V and VI) to identify areas where it may enhance its efforts to meet stakeholder needs. Without doing so, DCSA may miss an opportunity to better understand its stakeholders' views and improve its implementation of the NBIS system.

#### Conclusions

Personnel vetting is a critical process to help protect the nation's interests by providing a means to establish and maintain trust in the federal government's workforce. The IT systems that enable personnel vetting are necessary to process and protect the data of this workforce, including government personnel, contractors, and the military. As the new, consolidated IT system that will enable personnel vetting across the federal government, NBIS is both critical to the successful implementation of Trusted Workforce 2.0 reforms and to replacing legacy personnel vetting systems.

DCSA has made progress in developing capabilities for the NBIS system. However, until DCSA develops a reliable schedule and cost estimate, DCSA management will continue to lack the tools necessary to effectively guide the delivery and continued maintenance of those capabilities for the federal government and industry. The lack of progress in addressing schedule weaknesses and the program's unreliable cost estimate warrant congressional consideration, because these issues could further delay the NBIS system's planned replacement of legacy personnel vetting systems in 2024—nearly a decade after those systems were compromised in 2015.

NBIS deployment also depends on effective engagement with a wide range of stakeholders across the federal government and industry. DCSA has engaged with stakeholders while developing NBIS in a variety of ways, and the majority of external NBIS stakeholders that we surveyed were generally satisfied with how DCSA engaged with them. However, in their responses to our survey, external stakeholders also noted a number of concerns that could help inform DCSA's stakeholder engagement efforts and improve the deployment of the NBIS system.

# Matter for Congressional Consideration

Congress should consider requiring the Secretary of Defense to direct the NBIS Program Management Office to develop a reliable program schedule and cost estimate for NBIS as defined in GAO's Schedule Assessment Guide, Cost Estimating and Assessment Guide, and Agile Assessment Guide. (Matter for Consideration 1)

## Recommendation for Executive Action

The Secretary of Defense should ensure that the Director of the Defense Counterintelligence and Security Agency assesses and uses our survey results as a source of information to inform its efforts to improve engagement with stakeholders across both the federal government and industry. (Recommendation 1)

#### **Agency Comments**

We provided a draft of this report to DOD, OMB, ODNI, and OPM for review and comments. In its written comments, DOD concurred with our recommendation. DOD also identified steps it was taking to address our findings, and provided technical comments on challenges and accomplishments that we incorporated into our report as appropriate. OMB and ODNI did not provide comments. OPM provided technical comments, which we incorporated into our report as appropriate.

In its comments, DOD concurred with our recommendation that the DCSA Director assess and use our NBIS survey results as a source of information to inform its efforts to improve engagement with NBIS stakeholders. The department stated that DCSA will incorporate GAO survey feedback as a key data point in improving engagement with the customer base and that it will develop a comprehensive NBIS communications plan incorporating GAO survey results by January 15, 2024. This is a positive step as NBIS system implementation requires a coordinated and concerted effort across organizations in both government and industry.

We are sending copies of this report to the appropriate congressional committees, the Director of OMB, the Director of National Intelligence, the Director of OPM, and the Secretary of Defense. In addition, the report is available at no charge on the GAO website at <a href="https://www.gao.gov">https://www.gao.gov</a>.

If you or your staff have any questions about this report, please contact us at (202) 512-3058 or czyza@gao.gov and (202) 512-5017 or CruzCainM@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix VIII.

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#### List of Committees

The Honorable Mark R. Warner Chairman The Honorable Marco Rubio Vice Chairman Select Committee on Intelligence United States Senate

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

### Appendix I: Scope and Methodology

For our first objective, we reviewed Defense Counterintelligence and Security Agency (DCSA) documentation on the status of the National Background Investigation Services (NBIS) system development, analyzed DCSA schedule and cost estimate documentation, provided DCSA our analyses, and met with NBIS program officials throughout the engagement. We obtained the NBIS program's schedule files from June 2022, which were the most recent available at the time of our review. We discussed scheduling practices with NBIS program officials, and compared these against GAO best practices for project schedules.¹ We then provided our draft analysis to DCSA officials for comment in January 2023, and discussed our analysis with NBIS program officials in February 2023. We also interviewed and obtained documentation from DCSA officials about their efforts to implement our previous recommendation on the NBIS schedule based on our analysis in 2020.²

To assess the program's most recent cost estimate, we obtained the March 2022 NBIS program office estimate, discussed cost estimating with NBIS program officials in August 2022, and compared the estimate against GAO best practices for cost estimating.<sup>3</sup> We then provided DCSA a draft of our analysis in December 2022, requested a written response and any additional documentation, and discussed it with NBIS program officials in January and February 2023.

For our second objective, we surveyed 71 organizations—59 federal agencies and 12 industry organizations—about their experiences with the development and implementation of the NBIS system. We contacted the federal agency and industry officials that DCSA had reported to be their central points of contact for those organizations, and those officials identified appropriate points of contact within each of their organizations to serve as the survey respondent.

<sup>&</sup>lt;sup>1</sup>GAO, Schedule Assessment Guide: Best Practices for Project Schedules, GAO-16-89G (Washington, D.C.: December 2015). See also Appendix II.

<sup>&</sup>lt;sup>2</sup>GAO, Personnel Vetting: Actions Needed to Implement Reforms, Address Challenges, and Improve Planning, GAO-22-104093 (Washington, D.C.: Dec. 9, 2021).

<sup>&</sup>lt;sup>3</sup>GAO, Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs, GAO-20-195G (Washington, D.C.: March 2020). See also Appendix III.

#### Our survey population

- included all of the federal agency and industry officials responsible for implementing the NBIS system within their organizations for organizations that DCSA stated had completed the NBIS system onboarding process as of August 2022; and
- included several other federal agencies—the Department of the Navy, the Department of the Army, and the Office of Personnel Management (OPM)—even though they had not fully completed onboarding as of August 2022, because DCSA had identified them as key stakeholders. OPM requested to submit two separate surveys—one for the Facilities, Security, and Emergency Management office and one for the Suitability and Credentialing Executive Agent—because the two different entities have had different experiences using the NBIS system.

Although the National Reconnaissance Office was included in DCSA's list of onboarded organizations, we excluded it from our survey population because its central point of contact for NBIS stated that the National Reconnaissance Office does not anticipate using NBIS.

The survey included questions on the organizations' experience with onboarding to NBIS, submitting information on the capabilities their organizations need NBIS to be able to perform, and DCSA's outreach and engagement with them on NBIS. The survey also solicited the organizations' views on their satisfaction with the NBIS development process, and for the questions on satisfaction we used the following scale in the response options: very satisfied; somewhat satisfied; neither satisfied nor dissatisfied; somewhat dissatisfied; and very dissatisfied. In the report, we present "very satisfied" and "somewhat satisfied" responses together as "satisfied" and "very dissatisfied" and "somewhat dissatisfied" responses together as "dissatisfied."

Before distributing the survey, we pretested it with officials from five organizations and reviewed the survey with our internal survey specialist. During each pretest, all of which we conducted via a web conferencing application, we tested whether (1) the instructions and questions were clear and unambiguous, (2) the terms we used were accurate, and (3) pretest participants could offer a potential solution to any problems identified. We noted any potential problems identified by the reviewers through the pretests and modified the questionnaire based on the feedback received. Following those revisions, we conducted two pretests with different organizations with the revised survey.

We distributed the survey using a web-based survey platform. In some instances, survey respondents did not answer all questions because they were not applicable to their organization. We administered the survey from October 26, 2022 to November 23, 2022 and received responses from 51 of 59 federal agencies and 10 of 12 industry organizations, for an 86 percent response rate. As such, the corresponding responses reflected information and views as of that time. See appendix V for a copy of the survey administered to the 71 organizations.

We calculated the frequency of responses to our closed-ended survey questions, including by organization type (Department of Defense (DOD), non-DOD federal, and industry) and for the largest federal agencies. We defined size using the organizations' number of Electronic Questionnaires for Investigations Processing system (e-QIP) initiations in fiscal year 2019, the most recent year of data we had available. Specifically, we identified agencies as large if they had 10,000 or more e-QIP initiations in fiscal year 2019.

We conducted a content analysis of the responses to open-ended questions to identify examples relevant to our objectives. To complete the content analysis, two analysts reviewed the open-ended survey responses and independently developed a preliminary list of themes. The two analysts reviewed and discussed each other's list of themes and reached consensus on the final themes they would use to categorize the responses. Using the established themes, each analyst independently reviewed the open-ended responses and coded them. The two analysts then reviewed and compared their coding to identify areas of disagreement and discussed to reach consensus.

For our second objective, we also identified best practices related to Agile stakeholder engagement in the GAO *Agile Assessment Guide*, analyzed related DCSA documentation, and met with NBIS program officials.<sup>4</sup> We compared evidence of DCSA stakeholder engagement practices from documents and interviews with program officials against GAO best practices on Agile adoption, Agile requirements management, and Agile metrics. We then provided our draft analysis to DCSA officials for comment in February 2023, requested a written response and any

<sup>&</sup>lt;sup>4</sup>GAO, *Agile Assessment Guide: Best Practices for Agile Adoption and Implementation*, GAO-20-590G (Washington, D.C.: Sept. 28, 2020).

Appendix I: Scope and Methodology

additional documentation, and discussed our analysis with NBIS program officials in March 2023.

We conducted this performance audit from January 2022 to August 2023 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 II: Assessment of DCSA's Integrated Master Schedule for NBIS Compared with Best Practices

We summarized our assessment of the Defense Counterintelligence and Security Agency's (DCSA) schedule files for the National Background Investigation Services (NBIS) program against industry best practices for developing a schedule published in the GAO *Schedule Assessment Guide*, which are also referenced in the GAO *Agile Assessment Guide*. A high-quality, reliable schedule has four characteristics: it is comprehensive, controlled, credible, and well-constructed.

As shown in table 3, the NBIS schedule did not substantially meet any of the characteristics of a reliable schedule. It minimally met all four characteristics. A schedule is considered reliable if the assessment for each of the four characteristics are substantially met or fully met. If any of the characteristics are not met, minimally met, or partially met, then the schedule does not fully reflect the characteristics of a high-quality schedule and cannot be considered reliable.

Table 3: Assessment of the Defense Counterintelligence and Security Agency's (DCSA) Schedule Files for the National Background Investigation Services (NBIS) Program Compared with Best Practices

Best practice characteristic and overall assessment	Best practice	Assessment
Comprehensive: Minimally met	Capturing all activities	<b>Minimally met:</b> The schedules did not include work breakdown structures and dictionaries that traced the work in the schedule to key documents.
	Assigning resources to all activities	<b>Minimally met</b> : Program officials stated that the schedule is not resource-loaded. There was one exception where resources were assigned, but the assignment was not realistic.
	Establishing the durations of all activities	Partially met: All of the schedules included duration data, but we found considerable variation in median task duration across schedules and could not find documentation to explain the basis of estimating task duration. Not all schedules made proper use of calendars by including holidays.
Controlled: Minimally met	Updating the schedule with actual progress and logic	<b>Minimally met:</b> We found status dates for two of the nine files we reviewed. Without a status date, we cannot determine whether activities are in progress and how the project is proceeding.
	Maintaining a baseline schedule <sup>a</sup>	<b>Minimally met:</b> Of the nine schedules we examined, three had a baseline date. Of the three, only two had a status date, and only one schedule had a status date occurring after the baseline date.
Credible: Minimally met	Verifying that the schedule is traceable horizontally and vertically <sup>b</sup>	<b>Minimally met:</b> We could neither trace all of the schedule files horizontally because of incomplete logic nor trace them vertically because of differences between detailed schedules and schedule briefings.

<sup>1</sup>See GAO, Schedule Assessment Guide: Best Practices for Project Schedules, GAO-16-89G (Washington, D.C.: Dec. 22, 2015) and Agile Assessment Guide: Best Practices for Agile Adoption and Implementation, GAO-20-590G (Washington, D.C.: Sept. 28, 2020).

Appendix II: Assessment of DCSA's Integrated Master Schedule for NBIS Compared with Best Practices

Best practice characteristic and overall assessment	Best practice	Assessment
	Conducting a schedule risk analysis	<b>Minimally met:</b> Although we received a risk register, program officials explained that they have not conducted a schedule risk analysis.
Well-constructed: Minimally met	Sequencing all activities	<b>Minimally met:</b> The degree of sequencing varied significantly among programs with some lacking links between most activities.
	Confirming that the critical path is valid <sup>c</sup>	<b>Minimally met:</b> We did not find a true critical path and instead found discontinuous critical paths and others that originated with tasks lacking predecessors.
	Ensuring reasonable total float <sup>d</sup>	<b>Minimally met:</b> In addition to finding an activity with a negative float of 202 workdays, we found that excess total float values in schedules occurred between 14 percent and 85 percent of activities in individual schedules.

Source: GAO analysis of Department of Defense information. | GAO-23-105670

<sup>&</sup>lt;sup>a</sup>A baseline schedule represents the original configuration of the program plan and signifies the consensus of all stakeholders regarding the required sequence of events, resource assignments, and acceptable dates for key deliverables.

<sup>&</sup>lt;sup>b</sup>A schedule with horizontal and vertical traceability accounts for the interdependence of detailed activities, and activities are traceable among various levels of the schedule.

<sup>°</sup>The critical path is the longest continuous sequence of activities in a schedule.

<sup>&</sup>lt;sup>d</sup>Total float is the amount of time an activity can be delayed or extended before delay affects the program's finish date.

# Appendix III: Assessment of DCSA's Cost Estimate for NBIS Compared with Best Practices

We assessed the Defense Counterintelligence and Security Agency's (DCSA) cost estimate for the National Background Investigation Services (NBIS) program against best practices for cost estimating published in the GAO *Cost Estimating and Assessment Guide*, which are also referenced in the GAO *Agile Assessment Guide*.¹ A high-quality cost estimate has four characteristics: it is accurate, comprehensive, credible, and well-documented.

As summarized in table 4, the NBIS cost estimate minimally met three of the characteristics of a high-quality schedule—accurate, comprehensive, and well-documented—and did not meet one of the characteristics—credible. A cost estimate is considered reliable if the assessment for each of the four characteristics are substantially met or fully met. If any of the characteristics are not met, minimally met, or partially met, then the cost estimate does not fully reflect the characteristics of a high-quality cost estimate and cannot be considered reliable.

Table 4: Assessment of the Defense Counterintelligence and Security Agency's (DCSA) Cost Estimate for the National Background Investigation Services (NBIS) Program Compared with Best Practices

Best practice characteristic and overall assessment	Best practice	Assessment
Accurate: Minimally met	Based on a model developed by estimating each work breakdown structure element using the best methodology from the data collected.	<b>Minimally met:</b> The work breakdown structure is based on general budget categories rather than specific NBIS products.
	Adjusted properly for inflation.	<b>Minimally met:</b> While some inflation is traceable within the cost model, it is not clear how prior data were normalized to ensure valid comparisons or projections and inflation was applied in an inconsistent way.
	Contains few, if any, minor mistakes.	Partially met: We found some errors in the model, such as discrepancies between assumptions and cost model execution, lack of traceability to some costs, and execution of removal of double counted costs.
	Regularly updated to ensure it reflects program changes and actual costs.	<b>Partially met:</b> The estimate discusses changes made from prior estimates, including scope and differences in cost, but was not updated with actual costs.
	Documents, explains, and reviews variances between planned and actual costs.	Not met: Actual costs are not reflected in the estimate.

<sup>&</sup>lt;sup>1</sup>GAO, Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs, GAO-20-195G (Washington, D.C.: March 12, 2020) and Agile Assessment Guide: Best Practices for Agile Adoption and Implementation, GAO-20-590G (Washington, D.C.: Sept. 28, 2020).

	Best practice	Assessment
Best practice characteristic and overall assessment	Based on a historical record of cost estimating and actual experiences from other comparable programs.	<b>Minimally met</b> : The estimate was based on prior budgets rather than programmatic requirements and historical program data.
Comprehensive: Minimally met	Includes all life cycle costs.	<b>Minimally met:</b> Several items are excluded from the estimate despite being programmatic requirements and limited rationale is provided.
	Based on a technical baseline description that completely defines the program, reflects the current schedule, and is technically reasonable.	<b>Minimally met:</b> The estimate does not discuss the technical baseline.
	Based on a work breakdown structure that is product-oriented, traceable to the statement of work, and at an appropriate level of detail to ensure that cost elements are neither omitted nor double-counted.	Minimally met: The work breakdown structure is based on general budget categories rather than specific NBIS products.
	Documents all cost-influencing ground rules and assumptions.	<b>Partially met:</b> The cost estimate documentation discusses some, but not all, ground rules and assumptions and the rationale and historical data supporting these were lacking.
Credible: Not met	Includes a sensitivity analysis that identifies a range of possible costs based on varying major assumptions, parameters, and data inputs.	<b>Minimally met</b> : The estimate does not examine all assumptions or cost drivers to see where the estimate is most sensitive to cost.
	Includes a risk and uncertainty analysis that quantifies the imperfectly understood risks and identifies the effects of changing key cost driver assumptions and factors.	<b>Not met:</b> The estimate did not include a risk and uncertainty analysis.
	Employs cross-checks—or alternate methodologies—on major cost elements to validate results.	<b>Not met:</b> The estimate did not employ cross-checks or alternate methodologies.
	Compared to an independent cost estimate that is conducted by a group outside the acquiring organization to determine whether other estimating methods produce similar results.	<b>Not met:</b> The estimate was not compared to an independent cost estimate.
Well- documented: Minimally met	Documentation shows the source data used, the reliability of the data, and the estimating methodology used to derive each element's cost.	<b>Partially met:</b> Documentation included a narrative description of the methodology used for developing the estimate, the inflation index, and a cost model with supporting workbooks, but not all supporting data were adequate nor assessed for data reliability.
	Documentation describes how the estimate was developed so that a cost analyst unfamiliar with the program could understand what was done and replicate it.	Partially met: We were not able to use the documentation provided to replicate all of the costs in the estimate.
	Documentation discusses the technical baseline description and the data in the technical baseline are consistent with the cost estimate.	<b>Not met:</b> The cost estimate does not discuss the technical baseline.
	Documentation provides evidence that was reviewed and accepted by management.	<b>Minimally met:</b> Officials described how management reviewed the estimate, but the data provided were not adequate for program officials to update the estimate to reflect actual costs or program changes.

Source: GAO analysis of Department of Defense information. | GAO-23-105670

# Appendix IV: Assessment of DCSA's Implementation of Agile Best Practices for Stakeholder Engagement

We assessed the Defense Counterintelligence and Security Agency's (DCSA) implementation of Agile best practices related to stakeholder engagement against the GAO *Agile Assessment Guide*. The Agile best practices we identified are related to adoption, requirements, and metrics. As summarized in table 5, we found that the NBIS program fully met one, substantially met one, minimally met one, and partially met four Agile best practices as of February 2023.<sup>2</sup>

Table 5: Assessment of the National Background Investigation Services (NBIS) Program's Agile Adoption Compared with Best Practices, as of February 2023

Functional perspective	Best practice	Assessment
Agile adoption	Repeatable processes are in place	<b>Fully met:</b> The NBIS User Agreement defines stakeholder roles, and regular meetings ensure that repeatable processes are in place.
	Organization culture supports Agile methods	<b>Partially met:</b> The NBIS Capability Needs Statement articulates the software acquisition pathway and explains the Agile framework used to develop NBIS, but the long gap between submission of and signing of key documents indicates a lack of organizational support for Agile processes.
Agile requirements management	Elicit and prioritize requirements	Partially met: The Personnel Vetting Requirements Council (PVRC) identifies and validates requirements with stakeholders, but NBIS officials did not indicate how the program office uses customer feedback to inform improvements or changes to the program.
	Balance customer needs and constraints	Substantially met: NBIS officials provided documentation on its process to work with the user community on balancing needs and constraints. For example, the PVRC provides documentation on customer needs to NBIS and the NBIS program estimates the level of effort for requirements.
Agile metrics	Ensure metrics align with organization-wide goals and objectives	Minimally met: One NBIS development team demonstrated its use of a support tool (JIRA) to prioritize and track requirements. However, we could not determine how the information in that tool is traceable back to the capabilities document and functional requirements document. We also reviewed measures in the program's value assessment, but external agencies and industry reported difficulty providing feedback.
	Establish management commitment	<b>Partially met</b> : The value assessment includes objective and subjective measures and program officials reported weekly meetings to track progress, but we did not see reports that track software quality or defect rates.
	Commit to data-driven decision-making	Partially met: The NBIS development process emphasizes incremental delivery but we did not see where the program tracks related metrics.

Source: GAO analysis of information for the National Background Investigation Services (NBIS) program. | GAO-23-105670

<sup>&</sup>lt;sup>1</sup>GAO, *Agile Assessment Guide: Best Practices for Agile Adoption and Implementation*, GAO-20-590G (Washington, D.C.: Sept. 28, 2020).

<sup>&</sup>lt;sup>2</sup>The individual best practices are either not met, minimally met, partially met, substantially met, or fully met. There is no overall assessment.

	Total	Percent
How prepared do you feel to train your organization to use the	e eApplication (eApp)?	
1. Very prepared	11	18.3
2. Somewhat prepared	29	48.3
3. Not very prepared	20	33.3
Total	60	
No response	1	
How prepared do you feel to train your organization to use fur investigation services) once they are available?	ture NBIS capabilities (e.g. adjudication, back	ground
1. Very prepared	7	11.7
2. Somewhat prepared	26	43.3
3. Not very prepared	27	45.0
Total	60	
No response	1	
How satisfied or dissatisfied are you with the onboarding pro	cess in the following areas: eApp training?	
1. Very satisfied	10	16.9
2. Somewhat satisfied	24	40.7
3. Neither satisfied nor dissatisfied	14	23.7
4. Somewhat dissatisfied	9	15.3
5. Very dissatisfied	2	3.4
Total	59	
No response	2	
How satisfied or dissatisfied are you with the onboarding pro	cess in the following areas: Organization wo	rkflow set-up?
1. Very satisfied	16	27.1
2. Somewhat satisfied	18	30.5
3. Neither satisfied nor dissatisfied	8	13.6
4. Somewhat dissatisfied	13	22.0
5. Very dissatisfied	4	6.8
Total	59	
No response	2	
How satisfied or dissatisfied are you with the onboarding pro	cess in the following areas։ User profile set-ւ	ıp?
1. Very satisfied	22	37.3
2. Somewhat satisfied	18	30.5
3. Neither satisfied nor dissatisfied	5	8.5
4. Somewhat dissatisfied	13	22.0
5. Very dissatisfied	1	1.7
Total	59	
No response	2	

	Total	Percent
How satisfied or dissatisfied are you with the onboarding proorganization?	ocess in the following areas: NBIS access for e	entire
1. Very satisfied	16	28.1
2. Somewhat satisfied	17	29.8
3. Neither satisfied nor dissatisfied	13	22.8
4. Somewhat dissatisfied	8	14.0
5. Very dissatisfied	3	5.3
Total	57	
No response	4	
How satisfied or dissatisfied are you with the onboarding pro	cess in the following areas: Help desk suppor	t?
1. Very satisfied	19	35.2
2. Somewhat satisfied	16	29.6
3. Neither satisfied nor dissatisfied	16	29.6
4. Somewhat dissatisfied	2	3.7
5. Very dissatisfied	1	1.9
Total	54	
No response	7	
How satisfied or dissatisfied are you with the onboarding proto onboarding?	ocess in the following areas: Communication fr	rom DCSA related
1. Very satisfied	26	43.3
2. Somewhat satisfied		
2. Comownat Gallonea	17	28.3
Neither satisfied nor dissatisfied	17 7	28.3 11.7
3. Neither satisfied nor dissatisfied	7	11.7
Neither satisfied nor dissatisfied     Somewhat dissatisfied	7	11.7 11.7
Neither satisfied nor dissatisfied     Somewhat dissatisfied     Very dissatisfied	7 7 3	11.7 11.7
3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total	7 7 3 60 1	11.7 11.7 5.0
3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total  No response	7 7 3 60 1	11.7 11.7 5.0
3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total  No response  How satisfied or dissatisfied are you with the onboarding pro-	7 7 3 60 1 ocess in the following areas: Operational testin	11.7 11.7 5.0
3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total  No response  How satisfied or dissatisfied are you with the onboarding pro  1. Very satisfied	7 7 3 60 1 ocess in the following areas: Operational testin	11.7 11.7 5.0 ag? 24.1
3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total  No response  How satisfied or dissatisfied are you with the onboarding pro  1. Very satisfied 2. Somewhat satisfied	7 7 3 60 1 ocess in the following areas: Operational testin 14 13	11.7 11.7 5.0 ng? 24.1 22.4
3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total  No response  How satisfied or dissatisfied are you with the onboarding pro  1. Very satisfied 2. Somewhat satisfied 3. Neither satisfied nor dissatisfied	7 7 3 60 1 ocess in the following areas: Operational testin 14 13 11	11.7 11.7 5.0 19? 24.1 22.4 19.0 25.9
3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total  No response  How satisfied or dissatisfied are you with the onboarding pro  1. Very satisfied 2. Somewhat satisfied 3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied	7 7 3 60 1 ocess in the following areas: Operational testin 14 13 11	11.7 11.7 5.0 19? 24.1 22.4 19.0 25.9
3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total  No response  How satisfied or dissatisfied are you with the onboarding pro 1. Very satisfied 2. Somewhat satisfied 3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied	7 7 3 60 1 because in the following areas: Operational testin 14 13 11 15 5	11.7 11.7 5.0 19? 24.1 22.4 19.0 25.9
3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total  No response  How satisfied or dissatisfied are you with the onboarding pro 1. Very satisfied 2. Somewhat satisfied 3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total	7 7 3 60 1 ocess in the following areas: Operational testin 14 13 11 15 5 58 3	11.7 11.7 5.0 1g? 24.1 22.4 19.0 25.9 8.6
3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total  No response  How satisfied or dissatisfied are you with the onboarding pro 1. Very satisfied 2. Somewhat satisfied 3. Neither satisfied nor dissatisfied 4. Somewhat dissatisfied 5. Very dissatisfied  Total  No response  How satisfied or dissatisfied are you with the onboarding pro  Total  No response	7 7 3 60 1 ocess in the following areas: Operational testin 14 13 11 15 5 58 3	11.7 11.7 5.0 1g? 24.1 22.4 19.0 25.9 8.6

	Total	Percent
3. Neither satisfied nor dissatisfied	12	20.3
4. Somewhat dissatisfied	6	10.2
5. Very dissatisfied	2	3.4
Total	59	
No response	2	
How satisfied or dissatisfied are you with the onboarding procorganization?	ess in the following areas: Preparation for so	caling your
1. Very satisfied	19	32.8
2. Somewhat satisfied	15	25.9
3. Neither satisfied nor dissatisfied	9	15.5
4. Somewhat dissatisfied	11	19.0
5. Very dissatisfied	4	6.9
Total	58	
No response	3	
Has your organization shared its NBIS capability needs with a	ny of the following: DCSA liaison	
1. Yes	46	82.1
2. No	10	17.9
Total	56	
No response	5	
Has your organization shared its NBIS capability needs with a	ny of the following: NBIS team	
1. Yes	50	87.7
2. No	7	12.3
Total	57	
No response	4	
Has your organization shared its NBIS capability needs with a	ny of the following: Personnel Vetting Requir	rements Council
1. Yes	11	24.4
2. No	34	75.6
Total	45	
No response	16	
Has your organization shared its NBIS capability needs with a	ny of the following: industry working group/o	ouncil
1. Yes	12	25.0
2. No	36	75.0
Total	48	
No response	13	
Has your organization shared its NBIS capability needs with a	ny of the following: NBIS help desk	
1. Yes	27	49.1
2. No	28	50.9

	Total	Percent
Total	55	
No response	6	
Do you know the status of the NBIS capability needs that your organization	shared?	
1. Yes, I know the status of most or all of our NBIS capability needs	18	36.7
2. Yes, I know the status of some of our NBIS capability needs	15	30.6
3. Yes, I know the status of a few of our NBIS capability needs	10	20.4
4. No, I do not know the status of any of our NBIS capability needs	6	12.2
Total	49	
No response	5	
Did not see due to skip pattern	7	
How satisfied or dissatisfied are you with DCSA's communication on the st has shared?	atus of NBIS capability needs y	our organization
1. Very satisfied	16	30.8
2. Somewhat satisfied	16	30.8
3. Neither satisfied nor dissatisfied	10	19.2
4. Somewhat dissatisfied	7	13.5
5. Very dissatisfied	3	5.8
Total	52	
No response	2	
Did not see due to skip pattern	7	
Has DCSA ever provided any of the following types of information about NE milestones and timelines for NBIS development and implementation (i.e. NE		document with
1. Yes	52	91.2
2. No	5	8.8
Total	57	
No response	4	
Has DCSA ever provided any of the following types of information about NBIS capabilities?	BIS to your organization: Overvi	ew of all planned
1. Yes	45	78.9
2. No	12	21.1
Total	57	
No response	4	
Has DCSA ever provided any of the following types of information about NE asked questions?	BIS to your organization: Answe	ers to frequently
1. Yes	48	85.7
2. No	8	14.3
Total	56	

	Total	Percent
Has DCSA ever provided any of the following types of infor from DCSA about NBIS (e.g. at a conference or working gro		nal presentation
1. Yes	52	89.7
2. No	6	10.3
Total	58	
No response	3	
When was the last time your organization received this type	e of information: NBIS roadmap?	
1. Within the last month	20	41.7
2. 1 to 6 months	18	37.5
3. 7 to 12 months	7	14.6
4. Over 12 months	3	6.3
Total	48	
No response	4	
Did not see due to skip pattern	9	
How useful was this information for understanding NBIS de	evelopment and implementation: NBIS roadmap	?
1. Very useful	20	40.0
2. Somewhat useful	24	48.0
3. Not very useful	6	12.0
Total	50	
No response	2	
Did not see due to skip pattern	9	
When was the last time your organization received this type	e of information: Overview of planned NBIS cap	abilities?
1. Within the last month	14	34.2
2. 1 to 6 months	16	39.0
3. 7 to 12 months	9	22.0
4. Over 12 months	2	4.9
Total	41	
No response	4	
Did not see due to skip pattern	16	
How useful was this information for understanding NBIS decapabilities?	evelopment and implementation: Overview of pl	anned NBIS
1. Very useful	17	41.5
2. Somewhat useful	21	51.2
3. Not very useful	3	7.3
Total	41	
No response	4	
Did not see due to skip pattern	16	

	Total	Percent
When was the last time your organization received this typ	e of information: Answers to frequently asked o	questions?
1. Within the last month	16	37.2
2. 1 to 6 months	19	44.2
3. 7 to 12 months	7	16.3
4. Over 12 months	1	2.3
Total	43	
No response	5	
Did not see due to skip pattern	13	
How useful was this information for understanding NBIS d questions?	evelopment and implementation: Answers to fro	equently asked
1. Very useful	15	34.1
2. Somewhat useful	25	56.8
3. Not very useful	4	9.1
Total	44	
No response	4	
Did not see due to skip pattern	13	
When was the last time your organization received this typ (e.g. at a conference or working group meeting)?	e of information: a formal presentation from DC	SA about NBIS
1. Within the last month	24	51.1
2. 1 to 6 months	13	27.7
3. 7 to 12 months	7	14.9
4. Over 12 months	3	6.4
Total	47	
No response	5	
Did not see due to skip pattern	9	
How useful was this information for understanding NBIS d DCSA about NBIS (e.g. at a conference or working group n	levelopment and implementation: a formal preseneeting)?	entation from
1. Very useful	16	33.3
2. Somewhat useful	26	54.2
3. Not very useful	6	12.5
Total	48	
No response	4	
Did not see due to skip pattern	9	
Have you accessed the DCSA public website to find inform	nation on NBIS for your current organization?	
1. Yes	34	58.6
2. No	24	41.4
Total	58	
No response	3	

	Total	Percent
How useful do you find the DCSA website as a source of infor	mation about NBIS?	
1. Very useful	9	25.7
2. Somewhat useful	17	48.6
3. Not very useful	9	25.7
Total	35	
Did not see due to skip pattern	26	
Has your organization ever participated in any of the following meetings that include discussion of NBIS	g stakeholder engagement activities: Workin	g group or other
1. Yes	55	90.2
2. No	6	9.8
Total	61	
Has your organization ever participated in any of the following	g stakeholder engagement activities: NBIS d	emonstrations?
1. Yes	57	95.0
2. No	3	5.0
Total	60	
No response	1	
Has your organization ever participated in any of the following	g stakeholder engagement activities: NBIS w	orkshops?
1. Yes	49	86.0
2. No	8	14.0
Total	57	
No response	4	
Has your organization ever participated in any of the following	g stakeholder engagement activities: NBIS te	esting?
1. Yes	44	75.9
2. No	14	24.1
Total	58	
No response	3	
Working groups: Did the activity provide you an opportunity to	o give feedback on NBIS to DCSA?	
1. Yes	48	96.0
2. No	2	4.0
Total	50	
No response	5	
Did not see due to skip pattern	6	
NBIS demonstrations: Did the activity provide you an opportu	nity to give feedback on NBIS to DCSA?	
1. Yes	42	85.7
2. No	7	14.3
Total	49	
No response	8	

	Total	Percent
Did not see due to skip pattern	4	
NBIS workshops: Did the activity provide you an opportunit	y to give feedback on NBIS to DCSA?	
1. Yes	39	86.7
2. No	6	13.3
Total	45	
No response	4	
Did not see due to skip pattern	12	
NBIS testing: Did the activity provide you an opportunity to	give feedback on NBIS to DCSA?	
1. Yes	38	97.4
2. No	1	2.6
Total	39	
No response	5	
Did not see due to skip pattern	17	
Have you provided feedback to DCSA about NBIS, other that	n input on your capability needs?	
1. Yes	40	69.0
2. No	18	31.0
Total	58	
No response	3	
How much of your feedback about NBIS (other than input o DCSA?	n capability needs) is being or has been acknow	vledged by
1. Most or all of our feedback	18	48.7
2. Some of our feedback	15	10.5
		40.5
3. Little or none of our feedback	4	10.8
Little or none of our feedback  Total	4 37	
	<u> </u>	
Total	37	
Total No response	37 3 21	10.8
Total  No response  Did not see due to skip pattern  Has DCSA ever engaged with your organization about NBIS	37 3 21	10.8
Total  No response  Did not see due to skip pattern  Has DCSA ever engaged with your organization about NBIS my organization about NBIS?	37 3 21 in any of the following ways: DCSA liaison has	10.8
Total  No response  Did not see due to skip pattern  Has DCSA ever engaged with your organization about NBIS my organization about NBIS?  1. Yes	37 3 21 in any of the following ways: DCSA liaison has	reached out to
Total  No response  Did not see due to skip pattern  Has DCSA ever engaged with your organization about NBIS my organization about NBIS?  1. Yes  2. No	37 3 21 in any of the following ways: DCSA liaison has 50 8	10.8 reached out to
Total  No response  Did not see due to skip pattern  Has DCSA ever engaged with your organization about NBIS my organization about NBIS?  1. Yes  2. No  Total	37 3 21 in any of the following ways: DCSA liaison has 50 8 58 3	10.8 reached out to 86.2 13.8
Total  No response  Did not see due to skip pattern  Has DCSA ever engaged with your organization about NBIS my organization about NBIS?  1. Yes  2. No  Total  No response  Has DCSA ever engaged with your organization about NBIS	37 3 21 in any of the following ways: DCSA liaison has 50 8 58 3	10.8 reached out to 86.2 13.8
Total  No response  Did not see due to skip pattern  Has DCSA ever engaged with your organization about NBIS my organization about NBIS?  1. Yes  2. No  Total  No response  Has DCSA ever engaged with your organization about NBIS out to my organization about NBIS?	37 3 21 in any of the following ways: DCSA liaison has 50 8 58 3 in any of the following ways: NBIS program sta	reached out to  86.2 13.8  aff have reached
Total  No response  Did not see due to skip pattern  Has DCSA ever engaged with your organization about NBIS my organization about NBIS?  1. Yes  2. No  Total  No response  Has DCSA ever engaged with your organization about NBIS out to my organization about NBIS?  1. Yes	37 3 21 in any of the following ways: DCSA liaison has 50 8 58 3 in any of the following ways: NBIS program sta	reached out to  86.2  13.8  aff have reached  91.7

	Total	Percent
Has DCSA ever engaged with your organization about organization of updates to online platforms related to	NBIS in any of the following ways: DCSA has inform NBIS?	ned my
1. Yes	41	75.9
2. No	13	24.1
Total	54	
No response	6	
Has DCSA ever engaged with your organization about to NBIS Program Increment Planning?	NBIS in any of the following ways: DCSA has invited	d by organization
1. Yes	25	49.0
2. No	26	51.0
Total	51	
No response	10	
What is the frequency with which DCSA has engaged NBIS	with your organization in this way: DCSA liaison rea	ched out about
1. Weekly/Biweekly	14	28.6
2. Monthly	17	34.7
3. Quarterly	3	6.1
4. Annually	3	6.1
5. Other	12	24.5
Total	49	
No response	1	
Did not see due to skip pattern	11	
How useful do you find this way of engaging your orga	nization: DCSA liaison reached out about NBIS	
1. Very useful	27	57.5
2. Somewhat useful	19	40.4
3. Not very useful	1	2.1
Total	47	
No response	3	
Did not see due to skip pattern	11	
What is the frequency with which DCSA has engaged about NBIS	with your organization in this way: NBIS program sta	aff reached out
1. Weekly/Biweekly	15	28.9
2. Monthly	20	38.5
3. Quarterly	4	7.7
4. Annually	1	1.9
5. Other	12	23.1
Total	52	
No response	3	

	Total	Percent
Did not see due to skip pattern	9	
How useful do you find this way of engaging your organia	zation: NBIS program staff reached out about NB	S
1. Very useful	27	52.9
2. Somewhat useful	20	39.2
3. Not very useful	4	7.8
Total	51	
No response	4	
Did not see due to skip pattern	6	
What is the frequency with which DCSA has engaged wit updates to NBIS online platforms	h your organization in this way: DCSA informed o	rganization of
1. Weekly/Biweekly	10	26.3
2. Monthly	15	39.5
3. Quarterly	2	5.3
5. Other	11	28.9
Total	38	
No response	3	
Did not see due to skip pattern	20	
How useful do you find this way of engaging your organize platforms	zation: DCSA informed organization of updates to	NBIS online
1. Very useful	14	38.9
2. Somewhat useful	17	47.2
3. Not very useful	5	13.9
Total	36	
No response	5	
Did not see due to skip pattern	20	
What is the frequency with which DCSA has engaged wit Increment Planning	h your organization in this way: DCSA invited org	to NBIS Program
1. Weekly/Biweekly	7	33.3
2. Monthly	3	14.3
3. Quarterly	6	28.6
5. Other	5	23.8
Total	21	
No response	4	
No response Did not see due to skip pattern		
	4 36	m Increment
Did not see due to skip pattern  How useful do you find this way of engaging your organic	4 36	m Increment

	Total	Percent
3. Not very useful	4	19.1
Total	21	
No response	4	
Did not see due to skip pattern	36	
How consistent do you find the information across the different	ent DCSA and NBIS points of contact?	
1. Very consistent	26	46.4
2. Somewhat consistent	21	37.5
3. Not very consistent	9	16.1
Total	56	
No response	5	
How satisfied or dissatisfied are you with DCSA regarding NE concerns on NBIS?	BIS in the following areas: Responsiveness to	your questions or
1. Very satisfied	25	42.4
2. Somewhat satisfied	17	28.8
3. Neither satisfied nor dissatisfied	8	13.6
4. Somewhat dissatisfied	6	10.2
5. Very dissatisfied	3	5.1
Total	59	
No response	2	
How satisfied or dissatisfied are you with DCSA regarding NE questions or concerns on NBIS?	BIS in the following areas: Timeliness in addre	essing your
1. Very satisfied	22	37.3
2. Somewhat satisfied	17	28.8
3. Neither satisfied nor dissatisfied	10	16.9
4. Somewhat dissatisfied	7	11.9
5. Very dissatisfied	3	5.1
Total	59	
No response	2	
How satisfied or dissatisfied are you with DCSA regarding NE and roll-out?	BIS in the following areas: Transparency on N	BIS development
1. Very satisfied	21	35.0
2. Somewhat satisfied	13	21.7
3. Neither satisfied nor dissatisfied	12	20.0
4. Somewhat dissatisfied	8	13.3
5. Very dissatisfied	6	10.0
Total	60	
No response	1	

	Total	Percent
How satisfied or dissatisfied are you with DCSA regarding N	IBIS in the following areas: Level of dedicated	support on NBIS?
1. Very satisfied	25	43.9
2. Somewhat satisfied	15	26.3
3. Neither satisfied nor dissatisfied	15	26.3
4. Somewhat dissatisfied	2	3.5
Total	57	
No response	4	
How satisfied or dissatisfied are you with DCSA regarding NNBIS?	IBIS in the following areas: Frequency of comm	nunication on
1. Very satisfied	23	38.3
2. Somewhat satisfied	17	28.3
3. Neither satisfied nor dissatisfied	12	20.0
4. Somewhat dissatisfied	7	11.7
5. Very dissatisfied	1	1.7
Total	60	
No response	1	
How satisfied or dissatisfied are you with DCSA regarding N	IBIS in the following areas: Quality of commun	ication on NBIS?
1. Very satisfied	21	35.0
2. Somewhat satisfied	20	33.3
3. Neither satisfied nor dissatisfied	12	20.0
4. Somewhat dissatisfied	4	6.7
5. Very dissatisfied	3	5.0
Total	60	
No response	1	
How satisfied or dissatisfied are you with DCSA regarding N feedback on NBIS?	IBIS in the following areas: Opportunities to pr	rovide your
1. Very satisfied	23	38.3
2. Somewhat satisfied	18	30.0
3. Neither satisfied nor dissatisfied	9	15.0
4. Somewhat dissatisfied	7	11.7
5. Very dissatisfied	3	5.0
Total	60	
No response	1	

Source: GAO analysis of survey results. | GAO-23-105670

# Appendix VI: Results of NBIS Federal and Industry Onboarded Stakeholders' Open-Ended Survey Responses

We conducted a content analysis of the responses to open-ended survey questions to identify examples relevant to our objectives. Open-ended survey questions provided an opportunity for respondents to share additional thoughts about topics they wanted to raise. Not all respondents shared thoughts about each category in table 6 below; therefore, the categories are not representative of all survey respondents.

To complete the content analysis, two analysts reviewed the open-ended survey responses and independently developed a preliminary list of themes. The two analysts reviewed and discussed each other's list of themes and reached consensus on the final themes they would use to categorize the responses. Using the established themes, each analyst independently reviewed the open-ended responses and coded them according to whether they were generally negative or positive. The two analysts then reviewed and compared their coding to identify areas of disagreement and discussed to reach consensus.

Appendix VI: Results of NBIS Federal and Industry Onboarded Stakeholders' Open-Ended Survey Responses

Table 6: Results of GAO Analysis of External National Background Investigation Services (NBIS) Stakeholder Open-Ended Survey Responses

Category	Category elements	Number of organizations that shared related negative comments	Number of organizations that shared related positive comments
Defense Counterintelligence and Security Agency (DCSA) and NBIS Personnel	NBIS help desk; NBIS team; DCSA liaison; DCSA generally	8	38
System Development Feedback and Engagement	Opportunities to share NBIS requirements; feedback opportunities; engagement opportunities	26	26
Training	Training sessions; training and guidance materials; demonstrations	24	16
Communication	Frequency and consistency of communication; scheduling of meeting and events	11	10
NBIS Use – eApp	Workflow; case timelines; case integrity; user experience and interface	21	13
Technical Issues	System outages; missing data; data migration; bugs and errors; error resolution timeliness	23	4
System Access	Continuing access; adding new users; access to testing	14	0
Process to Transition to NBIS	DCSA expectations and goals; system adoption difficulty; organizational resources to use NBIS; simultaneous use of NBIS and legacy systems	29	2
Stakeholder Perceptions	Anticipated utility of NBIS; current utility of NBIS; confidence in NBIS; system readiness; NBIS adoption timeline	23	15

Source: GAO analysis of survey results. | GAO-23-105670

## Appendix VII: Comments from the Department of Defense



#### OFFICE OF THE UNDER SECRETARY OF DEFENSE

5000 DEFENSE PENTAGON WASHINGTON, DC 20301-5000

AUG - 2 2023

Alissa H. Czyz Director, Defense Capabilities & Management 441 G St. N.W. Washington, DC 205448

Dear Ms. Czyz,

Enclosed is the Department of Defense's (DoD) response to the GAO Draft Report GAO-23-105670SU, "Personnel Vetting: DoD needs a reliable schedule and cost estimate for the National Background Investigations Services Program" dated June 15, 2023 (GAO Code 105670). We have also provided a Summary of Challenges and Accomplishments from the Defense Counterintelligence and Security Agency for your consideration and incorporation into the final report.

Sincerely,

Tara L. Jones

Deputy Director for Defense Intelligence Counterintelligence, Law Enforcement, & Security

#### Enclosures:

- 1. Summary of Recommendation
- 2. Summary of Challenges and Accomplishments
- 3. GAO Letter 105670
- 4. Report GAO-23-105670

Appendix VII: Comments from the Department of Defense

#### GAO DRAFT REPORT DATED JUNE 15, 2023 GAO-23-105670SU (GAO CODE 105670)

"PERSONNEL VETTING: DOD NEEDS A RELIABLE SCHEDULE AND COST ESTIMATE FOR THE NATIONAL BACKGROUND INVESTIGATION SERVICES PROGRAM"

#### DEPARTMENT OF DEFENSE COMMENTS TO THE GAO RECOMMENDATION

**RECOMMENDATION FOR EXECUTIVE ACTION**: The Secretary of Defense should ensure that the Director of the Defense Counterintelligence and Security Agency (DCSA) assesses and uses our survey results as a source of information to inform its efforts to improve engagement with stakeholders across both the federal government and industry.

DoD RESPONSE: Concur. The survey results from the GAO report provided insights into the National Background Investigation Services (NBIS) customer base, which DCSA will use to improve future engagement with stakeholders. Generally, the GAO survey results show positive feedback on the frequency and quality of NBIS communications, as well as the recently launched eApp training and outreach efforts. As design and development activities are iteratively deployed, customer training and transition is being carefully orchestrated to align with scheduled capability and agency adoption timelines. It is important that surveys are systematically delivered to the appropriate agency participants to ensure responses are aligned with scheduled training and onboarding activities. Areas of improvement include strengthening communication efforts to ensure agency and industry customers are prepared for NBIS capability deployments and system transitions. DCSA is developing a comprehensive communications plan for the phased transition to NBIS applications as they are deployed. On behalf of the Secretary of Defense with oversight from the Under Secretary of Defense for Intelligence and Security, DCSA will incorporate GAO survey feedback as a key data point in improving engagement with the customer base. The comprehensive NBIS communications plan incorporating GAO survey results will be completed by January 15, 2024.

# Appendix VIII: GAO Contacts and Staff Acknowledgments

GAO Contacts	Alissa H. Czyz, (202) 512-3058 or czyza@gao.gov Marisol Cruz Cain, (202) 512-5017 or cruzcainm@gao.gov
Staff Acknowledgments	In addition to the contacts named above, Kimberly Seay (Assistant Director), Parke Nicholson (Analyst-in-Charge), Emile Ettedgui, Christopher Gezon, Suzanne Kaasa, Jason Lee, Jennifer Leotta, Kelly Liptan, Carlo Mozo, Clarice Ransom, Mike Shaughnessy, Carter Stevens, and Mary Weiland made key contributions to this report.

#### Related GAO Products

High-Risk Series: Efforts Made to Achieve Progress Need to Be Maintained and Expanded to Fully Address All Areas. GAO-23-106203. Washington, D.C.: April 20, 2023.

Personnel Vetting: Actions Needed to Implement Reforms, Address Challenges, and Improve Planning. GAO-22-104093. Washington, D.C.: December 9, 2021.

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

Federal Management: Selected Reforms Could Be Strengthened by Following Additional Planning, Communication, and Leadership Practices. GAO-20-322. Washington, D.C.: April 23, 2020.

High-Risk Series: Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas. GAO-19-157SP. Washington, D.C.: March 6, 2019.

Personnel Security Clearances: Additional Actions Needed to Implement Key Reforms and Improve Timely Processing of Investigations. GAO-18-431T. Washington, D.C.: March 7, 2018.

Personnel Security Clearances Additional Actions Needed to Ensure Quality, Address Timeliness, and Reduce Investigation Backlog. GAO-18-29. Washington, D.C.: December 12, 2017.

Personnel Security Clearances: Plans Needed to Fully Implement and Oversee Continuous Evaluation of Clearance Holders. GAO-18-117. Washington, D.C.: November 21, 2017.

Information Security: OPM Has Improved Controls, but Further Efforts Are Needed. GAO-17-614. Washington, D.C.: August 3, 2017.

Information Security: Agencies Need to Improve Controls over Selected High-Impact Systems. GAO-16-501. Washington, D.C.: May 18, 2016.

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