DHS Needs to Improve Annual Monitoring of Major Acquisition Programs to Ensure They Continue to Meet Department Needs

Homeland
Security

September 21, 2023

MEMORANDUM FOR: R.D. Alles
Senior Official Performing the Duties of the Under
Secretary for Management

FROM: Joseph V. Cuffari, Ph.D.   JOSEPH V   Digitally signed by
Inspector General   CUFFARI   JOSEPH V CUFFARI
Date: 2023.09.21
14:26:57 -04'00'

SUBJECT: *DHS Needs to Improve Annual Monitoring of Major
Acquisition Programs to Ensure They Continue to Meet
Department Needs*

For your action is our final report, *DHS Needs to Improve Annual Monitoring of
Major Acquisition Programs to Ensure They Continue to Meet Department Needs*.
We incorporated the formal comments provided by your office.

The report contains three recommendations aimed at improving annual
monitoring of major acquisition programs in sustainment. Your office
concurred with all three recommendations. Based on information provided in
your response to the draft report, we consider the recommendations open and
resolved. Once your office has fully implemented the recommendations, please
submit a formal closeout letter to us within 30 days so that we may close the
recommendations. The memorandum should be accompanied by evidence of
completion of agreed-upon corrective actions. Please send your response or
closure request to OIGAuditsFollowup@oig.dhs.gov.

Consistent with our responsibility under the *Inspector General Act*, we will
provide copies of our report to congressional committees with oversight and
appropriation responsibility over the Department of Homeland Security. We
will post the report on our website for public dissemination.

Please contact me with any questions, or your staff may contact Kristen
Bernard, Acting Deputy Inspector General for Audits, at (202) 981-6000.

Attachment

DHS OIG HIGHLIGHTS
DHS Needs to Improve Annual Monitoring of Major Acquisition Programs to Ensure They Continue to Meet Department Needs

Why We Did This Audit

DHS invests billions of dollars to acquire and sustain critical systems to support its many missions. Given the cost and magnitude of these investments, we conducted this audit to determine the extent to which DHS components analyze system performance of major acquisition programs in sustainment according to Federal guidance and DHS acquisition policy.

What We Recommend

We made three recommendations to improve the oversight of major acquisition programs in sustainment.

For Further Information:
Contact our Office of Public Affairs at (202) 981-6000, or email us at DHS-OIG.OfficePublicAffairs@oig.dhs.gov.

What We Found

Once a major system is fully deployed, it transitions to the sustainment phase, where Office of Management and Budget Circular No. A-11 provides guidance to Federal agencies to conduct an operational analysis (OA) periodically to ensure systems continue to perform as intended. From fiscal years 2018 through 2021, the Department of Homeland Security had 15 major systems that transitioned to sustainment and required OAs; these systems had operations and maintenance costs totaling about $1.1 billion in FY 2021. DHS components completed an OA for 12 of these 15 systems but did not complete all 12 OAs in accordance with Federal and departmental guidance. Components used inaccurate, outdated, or incomplete information to assess system performance, or omitted required sections of the OA, such as the cost analysis and corrective action sections. In addition, we found the Transportation Security Administration did not complete an OA for three of its systems.

This occurred, in part, because components did not follow the requirements in the DHS *Operational Analysis Guidebook* for measuring performance and because DHS does not have sufficient guidance for conducting OAs. As a result, DHS does not have assurance that its multibillion-dollar systems in sustainment perform as intended and fully meet mission needs. Without accurate and transparent reporting, the Department risks continuing to invest in programs that detract from its mission and create significant cost overruns.

DHS Response

DHS concurred with all three recommendations.

Background

Each year, the Department of Homeland Security invests billions of dollars in critical systems to support its vast mission operations. DHS and its components acquire systems through the DHS acquisition management process.[1] The sustainment phase is reached when a system is fully deployed; this is the final phase in the DHS Acquisition Life Cycle Framework. It includes operating and maintaining the system, making minor enhancements, and conducting periodic reviews to assess obsolescence and mission gaps. According to DHS' *Systems Engineering Life Cycle Guidebook*,[2] 60 to 80 percent of a system's total life cycle costs occur during the sustainment phase.

Once a system enters the sustainment phase, components are responsible for managing and operating the system throughout its usable life. To ensure critical systems continue to perform as intended, Office of Management and Budget (OMB) Circular No. A-11, Part 7, *Supplement to OMB Circular A-11: Planning, Budgeting, and Acquisition of Capital Assets,* provides guidance for agencies to conduct an operational analysis (OA) periodically for all major[3] information technology (IT) systems and non-IT systems to ensure investments continue to meet agency needs. An OA is a tool used to monitor a system's ongoing performance. During an OA, components assess specific key factors such as performance, cost, schedule, customer satisfaction, and innovation. This assessment helps component program managers identify system deficiencies, possible areas for cost savings, and ways to achieve DHS' operational objectives more efficiently and effectively.

In 2016, DHS' Office of the Chief Information Officer (OCIO) issued Instruction 102-02-001, *Capital Planning and Investment Control Guidebook*[4] (CPIC Guidebook), to implement the requirements outlined in OMB Circular No. A-11. The CPIC Guidebook provides a framework for components to plan, acquire, and maintain IT systems. In addition, DHS OCIO issued Instruction Guide 102-02-002, *Operational Analysis Guidebook*[5] (OA Guidebook), to further implement the CPIC Guidebook. The OA Guidebook describes how to conduct OAs, review systems, and report OA findings on an annual basis.

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[1] DHS Instruction 102-01-001, Rev. 02, *Acquisition Management Instruction*, DHS Under Secretary for Management (2023). Instruction 102-01-001 provides the framework for consistent and efficient departmental management, support, review, and approval of DHS acquisition programs according to OMB Circular A-11.

[2] *Systems Engineering Life Cycle Guidebook*, DHS Office of Program Accountability and Risk Management, May 2021.

[3] DHS classifies acquisition programs as "major" if they have an expected life cycle cost estimate over $300 million, or if they are of special interest.

[4] DHS Instruction 102-02-001, *Capital Planning and Investment Control Guidebook*, Enterprise Business Management Office, DHS Office of the Chief Information Officer, March 2016.

[5] DHS Instruction Guide 102-02-002, *Operational Analysis Guidebook*, Enterprise Business Management Office, DHS Office of the Chief Information Officer, March 2016.

From fiscal years 2018 through 2021, DHS had 15 major systems that transitioned to sustainment and required annual OAs. These 15 systems serve various DHS components, including U.S. Customs and Border Protection (CBP), U.S. Immigration and Customs Enforcement (ICE), U.S. Coast Guard (Coast Guard), U.S. Citizenship and Immigration Services (USCIS), the Transportation Security Administration (TSA), and the Federal Emergency Management Agency (FEMA). DHS reported spending almost $1.1 billion in FY 2021 for operations and maintenance (O&M) costs for these 15 mission-critical systems. See Table 1 for a complete list of the systems we reviewed.

Table 1. FY 2021 O&M Costs for Systems in Sustainment

Component	System in Sustainment	Acquisition Type	O&M Cost ($M)
CBP	Border Patrol Enforcement System	IT	$69.93
CBP	Tactical Communication Modernization	IT	$23.74
CBP	TECS Modernization	IT	$47.25
Coast Guard	Nationwide Automatic Identification System	IT	$6.38
Coast Guard	Rescue 21	IT	$92.95
FEMA	Logistics and Supply Chain Management System	IT	$22.99
ICE	Student and Exchange Visitor Information System	IT	$11.04
ICE	TECS Modernization	IT	$22.89
TSA	Advanced Imaging Technology	Non-IT	$37.83
TSA	Advanced Technology	Non-IT	$62.50
TSA	Electronic Baggage Screening Program	Non-IT	$227.48
TSA	Personnel Futures Program	Non-IT	$159.88
TSA	Technology Infrastructure Modernization	IT	$84.19
USCIS	Transformation	IT	$69.10
USCIS	Verification Modernization	IT	$136.01
Total	**N/A**	**N/A**	**$1,074.16**

Source: DHS Office of Inspector General analysis of component FY 2021 O&M cost data

Historically, DHS has faced challenges ensuring acquisition programs continue to meet mission needs. In recent years, DHS OIG conducted audits on various acquisitions and identified issues with poorly defined operational requirements, noncompliance with the DHS Acquisition Life Cycle Framework, and insufficient monitoring of deployed systems.[6] We conducted this audit to determine the extent to which DHS components analyze system performance of

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[6] *TSA Needs to Improve Monitoring of the Deployed Advanced Imaging Technology System,* OIG-20-33, May 2020; *U.S. Customs and Border Protection's Acquisition Management of Aviation Fleet Needs Improvement to Meet Operational Needs,* OIG-21-53, Aug. 2021; *Coast Guard Should Prioritize Upgrades to Rescue 21 Alaska and Expand Its Public Notifications during Outages,* OIG-21-65, Sep. 2021; *CBP and CWMD Need to Improve Monitoring and Maintenance of Radiation Portal Monitor Systems (Redacted),* OIG-22-39, Apr. 2022.

major acquisition programs in sustainment according to Federal guidance and DHS acquisition policy.

Results of Audit

Components Did Not Always Monitor Cost and Performance of Mission-Critical Systems

OMB Circular No. A-11 provides guidance for component program managers to conduct an OA periodically for IT and non-IT systems to ensure they continue to perform as intended. The circular also provides guidance for components to ensure the sustainment costs are reasonable compared to pre-established cost estimates developed in the planning phase of the acquisition. If there is a cost variance of 10 percent or more, components must analyze the reasons for the cost overrun or savings and identify planned actions to correct the variance. If the system is not performing as intended, components must report the deficiency to OMB and prepare a corrective action plan. In these cases, components may be required to modernize, redesign, or terminate the system, or to propose a new solution to replace the current one.

We reviewed components' FY 2021 OAs for 15 major systems in sustainment; these systems had O&M costs totaling almost $1.1 billion in FY 2021. We found that components completed an OA for 12 of the 15

> TSA did not conduct an OA for three of its five systems in sustainment; these systems' **O&M costs totaled about $260 million** in FY 2021.

systems. Specifically, TSA did not complete an OA for three of its five systems in our review; these systems' O&M costs totaled about $260 million in FY 2021. For example, at the time of our review, TSA had yet to complete an OA of its Advanced Imaging Technology program, even though the system entered sustainment in FY 2019. According to TSA officials, OAs are only required for IT systems. Despite this belief, TSA conducted an OA for one of four non-IT systems in our review.

In the 12 OAs we reviewed, we identified several instances in which components reported inaccurate, outdated, or incomplete information to assess a system's cost or performance. Some components omitted required cost or performance sections. See Appendix B for our analysis of whether the 12 OAs assessed cost and performance in accordance with OMB Circular No. A-11. Of particular note:

- Two OAs did not include a cost analysis section. Specifically, Coast Guard did not include a cost analysis for both the Rescue 21 and National Automatic Identification System programs. According to Coast

Guard officials, they use OAs to assess performance and conduct cost assessments separate from the OA.

- Five OAs did not use the life cycle cost estimate as a baseline to assess costs. Instead, components used congressional budget justifications to calculate cost variances. By using an inaccurate baseline, components that would have otherwise had to develop a corrective action plan with an explanation for cost overruns fell below the 10 percent reporting threshold. For instance, TSA reported the Electronic Baggage Screening program was below the 10 percent threshold because it used the congressional budget justification of $248.44 million as its baseline. If TSA had correctly used the life cycle cost estimate of $120.24 million as its baseline, the OA would have reported an 89 percent increase in O&M costs, necessitating a corrective action plan. See Appendix C for our complete analysis of cost baselines used to assess O&M costs.

- Four OAs correctly used the life cycle cost estimate as the baseline to assess costs but inaccurately reported the cost variance. For example, ICE reported the Student and Exchange Visitor Information System program was below the 10 percent threshold. However, we calculated a 42 percent cost variance when comparing FY 2021 O&M costs to the life cycle cost estimate. FEMA also reported that the cost variance for the Logistics and Supply Chain Management System program was below 10 percent, but we calculated a 13 percent variance when comparing FY 2021 O&M costs to the life cycle cost estimate. See Appendix D for our complete analysis of OA inaccurate cost variances.

We also found components did not assess all performance parameters in their OAs. While planning an acquisition, components are required to identify key performance parameters that a system must meet to successfully perform its mission. According to the OA Guidebook, the OA measures whether a system is still meeting all of these established key performance parameters. If the system is not performing as intended, components must report the deficiency to OMB and prepare a corrective action plan. We found that 7 of 12 OAs did not measure key performance parameters according to Federal and departmental guidance. Five OAs assessed some, but not all key performance parameters. For example, the USCIS Transformation program identified four key performance parameters the system must meet to successfully execute its mission: reliability, availability, lead time, and cybersecurity. Yet the program's FY 2021 OA did not assess two of the four parameters: lead time and cybersecurity.

In addition, we found one OA used outdated data to assess performance. Specifically, USCIS used 2019 data to assess performance for its Verification Modernization program instead of using FY 2021 data. In another OA, CBP reported the TECS Modernization program met performance requirements but

did not include any details of the analysis it conducted or what it measured. See Table 2 for a list of OAs that did not fully measure all key performance parameters.

Table 2. OAs That Did Not Fully Measure System Key Performance Parameters

Component	Program in Sustainment	Total Key Performance Parameters	Total Measured	Percent Measured
CBP	Border Patrol Enforcement System	6	5	83%
CBP	TECS Modernization	8	0	0%
Coast Guard	Rescue 21	10	1	10%
FEMA	Logistics and Supply Chain Management System	7	2	29%
TSA	Electronic Baggage Screening Program	3	2	67%
USCIS	Transformation	4	2	50%
USCIS	Verification Modernization	7	0	0%

Source: DHS OIG analysis of key performance parameters assessed in FY 2021 OAs

Finally, one OA did not include a corrective action plan, as required. Coast Guard did not develop a plan to remediate performance issues, even though its FY 2021 OA reported none of the five key performance parameters were met for the Nationwide Automatic Identification System, a program totaling over $6 million in O&M costs in FY 2021. According to a Coast Guard official, the system has not met its performance goals since being deployed in 2018.

> In FY 2021, Coast Guard **spent over $6 million** on operations and maintenance costs for the Nationwide Automatic Identification System, even though the system has not met its performance goals since being deployed in 2018.

These instances of noncompliance occurred because DHS does not have sufficient guidance for conducting OAs. In 2016, DHS OCIO issued the CPIC Guidebook and OA Guidebook to assist components in implementing the requirements in OMB Circular No. A-11. However, the requirements in the OA Guidebook only apply to IT systems. DHS does not have clear instructions covering non-IT investments even though OMB Circular No. A-11 provides guidance for agencies to conduct OAs periodically for both IT and non-IT systems. According to the CPIC Guidebook, OAs are required to be conducted annually for both major IT and non-IT systems and submitted to OMB. Further, although the OA Guidebook can be tailored for use by non-IT investments, it does not explicitly require components to conduct annual OAs for non-IT systems.

Additionally, the OA Guidebook's requirements for IT systems do not specify what baseline components should use when comparing planned costs to actual costs. For example, the OA Guidebook requires that a financial performance analysis be conducted to compare current cost performance against the pre-established cost baseline for IT investments. However, the OA Guidebook does not require use of the life cycle cost estimate to assess costs. We also attribute identified deficiencies to component program managers not following the OA Guidebook requirements for measuring performance. We found component program managers did not follow the OA Guidebook's requirement to measure performance against the key performance parameters identified in the Acquisition Program Baseline.

As a result, DHS does not have assurance that its multibillion-dollar systems in sustainment perform as intended and fully meet mission needs. Without properly conducting OAs and accurately reporting the results, DHS components do not have the necessary information to inform sound management decisions regarding whether to continue to invest in major systems acquisition programs or whether to terminate programs that no longer meet needs.

Conclusion

DHS makes significant investments to acquire, operate, and maintain mission-critical IT and non-IT systems. According to Federal guidance, poorly performing systems detract from mission effectiveness by using resources that could be directed to other mission priorities. If a system is not properly managed, its useful life can be shortened dramatically or prolonged beyond the planned termination date at high cost and risk, thereby reducing the return on taxpayers' investment. Without accurate and transparent reporting, the Department risks continuing to invest in programs that detract from its mission and create significant cost overruns.

Recommendations

Recommendation 1: We recommend the Under Secretary for Management require the Office of the Chief Information Officer, in consultation with the Office of the Chief Financial Officer, Cost Analysis Division, to issue an approved *Operational Analysis Guidebook*, to include, at a minimum:

- Office of Management and Budget Circular No. A-11 guidance for components to conduct an operational analysis for information technology and non–information technology systems; and

- The most current life cycle cost estimate document as the cost baseline for assessing system cost performance.

Recommendation 2: We recommend the Under Secretary for Management issue an instruction manual for conducting an operational analysis.

Recommendation 3: We recommend the Under Secretary for Management require Coast Guard's Nationwide Automatic Identification System program to implement an effective corrective action plan to identify (1) the root cause of the performance deficiencies and (2) the steps needed to meet the performance measure baselines identified in the Acquisition Program Baseline.

Management Comments and OIG Analysis

DHS concurred with all three recommendations in the report. Appendix A contains a copy of the Department's response in its entirety. DHS also provided technical comments to our draft report, and we incorporated these comments, as appropriate. A summary of the Department's responses to the recommendations and our analysis follows.

DHS Response to Recommendation 1: Concur. While conducting OAs has been and continues to be a DHS standard practice for IT systems, DHS recognizes the importance of strengthening the quality and oversight of this process while incorporating non-IT investments, as appropriate. Although DHS OCIO does not have authority/jurisdiction over non-IT investments, DHS OCIO will work with DHS partners, as they are identified, to develop targeted policy and effective oversight. Specifically, on August 14, 2023, DHS OCIO initiated an integrated project team to determine whether DHS Instruction Guide 102-02-002, *Operational Analysis Guidebook*, dated March 24, 2016, will be updated as a whole or broken out into an instruction and a separate implementing guidebook. Additionally, DHS OCIO will work closely with the DHS Office of the Chief Financial Officer, Cost Analysis Division, to include life cycle cost estimation guidance in Instruction Guide 102-02-002 as noted in this recommendation. Estimated Completion Date (ECD): September 30, 2024.

OIG Analysis: The Department's corrective action plan is responsive to the recommendation. We consider this recommendation open and resolved pending the issuance of an updated OA Guidebook.

DHS Response to Recommendation 2: Concur. DHS OCIO will update OA instructions and guidance for IT investments and is currently working with DHS partners to address OAs for non-IT investments. Non-IT OA governance will either be included in Instruction Guide 102-02-002 updates, as previously discussed, or in a new governance document. Upon completion of all updates or new instructions, DHS OCIO, along with DHS partners as deemed appropriate, will work with all applicable IT and non-IT investments to ensure compliance. ECD: September 30, 2024.

OIG Analysis: The Department's corrective action plan is responsive to the recommendation. We consider this recommendation open and resolved pending the issuance of an instruction manual for conducting an OA.

DHS Response to Recommendation 3: Concur. Coast Guard's Program Management Office worked with the System Sponsor Representative to implement an effective corrective action plan to identify the root cause of performance deficiencies and the steps needed to meet performance measure baselines. The corrective action plan resulted in the creation of two projects to reach the established key performance parameters: (1) Backend Modernization, created April 15, 2022; and (2) Base Station Replacement, created June 1, 2022. Currently, DHS OCIO is monitoring both projects through the Program Health Assessments office. ECD: September 30, 2026.

OIG Analysis: The Department's corrective action plan is responsive to the recommendation. We consider this recommendation open and resolved until the Department provides the Coast Guard Nationwide Automatic Identification System program's corrective action plan.

Objective, Scope, and Methodology

The Department of Homeland Security Office of Inspector General was established by the *Homeland Security Act of 2002* (Public Law 107–296) by amendment to the *Inspector General Act of 1978*.

We conducted this audit to determine the extent to which the DHS components analyze system performance of major acquisition programs in sustainment according to Federal guidance and DHS acquisition policy. The scope of our audit included reviewing component-generated OAs that assessed system performance for major acquisitions that have transitioned to sustainment. Our universe included 17 Level 1 and Level 2 major acquisition programs that transitioned to sustainment from FY 2018 through 2021. This included IT and non-IT acquisition programs as identified in the DHS Master Acquisition Oversight List (MAOL).[7]

To determine the completeness and accuracy of the universe of 17 acquisitions, we compared the Department-provided list of major acquisition programs that transitioned to sustainment from FY 2018 through FY 2021 to the list provided by each component and the MAOL. We found no discrepancies between the three lists. However, we identified two programs that had just transitioned to sustainment and had not yet conducted an OA. We removed those from our

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[7] Level 1 and Level 2 major acquisition programs are those with expected life cycle cost estimates over $300 million, or those that are of special interest. Level 1 and 2 programs are governed in accordance with DHS Instruction 102-01-001, *Acquisition Management Instruction*.

universe, resulting in a universe of 15 major acquisition programs in sustainment from FY 2018 through 2021.

To identify any discrepancies between established baselines and actual performance and cost results, we obtained performance and cost data for FY 2021 from DHS' Investment Evaluation, Submission, and Tracking System, a DHS software tool that compiles, manages, and reports data on DHS' major acquisition investments; the Office of Program Accountability and Risk Management's SharePoint; or directly from component program managers. We reviewed the programs' performance and cost sections in the OAs and compared them to each program's Acquisition Program Baseline and life cycle cost estimate. Based on these tests, we determined the data to be sufficiently reliable to support our audit objectives.

To accomplish our objective, we identified and reviewed pertinent Federal guidance, as well as departmental policies, procedures, and directives. We reviewed the following criteria:

- OMB Circular No. A-11, Part 7, *Planning, Budgeting, and Acquisition of Capital Assets* (2021)
- DHS Instruction 102-02-001, *Capital Planning and Investment Control Guidebook*
- DHS Instruction Guide 102-02-002, *Operational Analysis Guidebook*

In addition, we reviewed prior DHS OIG and U.S. Government Accountability Office (GAO) reports related to our objective. We also conducted interviews with staff from the following components:

- U.S. Customs and Border Protection
- Federal Emergency Management Agency
- U.S. Immigration and Customs Enforcement
- Office of the Chief Information Officer
- Office of the Chief Financial Officer
- Office of Program Accountability and Risk Management
- Transportation Security Administration
- United States Citizenship and Immigration Services
- United States Coast Guard

To understand how DHS components assessed the operational and cost performance of major acquisition programs in sustainment, we developed data collection instruments to compare the cost and performance baselines identified in the Acquisition Program Baseline and life cycle cost estimate to what was reported in the OA. We then met with program managers and

program office officials to discuss any discrepancies between the baseline and actual results.

We compared OMB Circular No. A-11 to Department and component criteria, if applicable, to identify any significant shortfalls between the three levels of guidance. Our assessment of the components' policies and procedures would not disclose all material weakness in the control structure. However, our assessment disclosed that the Department did not have clear guidance on which systems required an OA, how to conduct an OA, and the documents that should be used to assess performance and cost. We discuss these weaknesses in the body of the report.

We conducted this performance audit between November 2021 and June 2023 pursuant to the *Inspector General Act of 1978,* 5 U.S.C. §§ 401-424, and 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.

DHS OIG's Access to DHS Information

During this audit, DHS provided timely responses to DHS OIG's requests for information and did not delay or deny access to information we requested.

The Office of Audits major contributors to this report are Carolyn Hicks, Director; Apostolos Exarchos, Director; Areti Bruno, Auditor in Charge; Aaron Naas, Auditor; Falon Strong, Auditor; Michael Levy, Auditor; Lindsey Koch, Communications Analyst; and Jessica Jackson, Independent Referencer.

Appendix A
DHS Comments to the Draft Report

Homeland Security

September 1, 2023

MEMORANDUM FOR: Joseph V. Cuffari, Ph.D.
                               Inspector General

FROM: Jim H. Crumpacker, CIA, CFE
                               Director
                               Departmental GAO-OIG Liaison Office

JIM H CRUMPACKER
Digitally signed by JIM H CRUMPACKER
Date: 2023.09.01 14:47:22 -04'00'

SUBJECT: Management Response to Draft Report: "DHS Needs to
                               Improve Annual Monitoring of Major Acquisition Programs
                               to Ensure They Continue to Meet Department Needs"
                               (Project No. 22-014-AUD-DHS)

Thank you for the opportunity to comment on this draft report. The U.S. Department of Homeland Security (DHS or the Department) appreciates the work of the Office of Inspector General (OIG) in planning and conducting its review and issuing this report.

DHS leadership is pleased to note OIG's recognition that annually DHS invests billions of dollars to acquire and sustain critical Information Technology (IT) systems to support its many missions. As part of this effort, the DHS Chief Information Officer oversees the DHS-wide IT portfolio and reviews annual operational analysis (OA) on all applicable IT systems. DHS remains committed to strengthening its OA process and quality, as well as delivering, modernizing, and ensuring that capabilities support the Department's vast mission space, as appropriate.

The draft report contained three recommendations with which the Department concurs. Enclosed find our detailed response to each recommendation. DHS previously submitted technical comments addressing several accuracy, contextual, and other issues under a separate cover for OIG's consideration.

Again, thank you for the opportunity to review and comment on this draft report. Please feel free to contact me if you have any questions. We look forward to working with you again in the future.

Enclosure

**Enclosure: Management Response to Recommendations
Contained in 22-014-AUD-DHS**

OIG recommended that the Under Secretary for Management:

Recommendation 1: Require the Office of the Chief Information Officer [OCIO], in consultation with the Office of Chief Financial Officer [OCFO], Cost Analysis Division, to issue an approved Operational Analysis Guidebook, MD-102-02-002, to include, at a minimum:

- Office of Management and Budget Circular No. A-11 guidance for components to conduct an operational analysis for information technology and non–information technology systems; and
- The most current life cycle cost estimate document as the cost baseline for assessing system cost performance.

Response: Concur. While conducting OAs has been and continues to be a DHS standard practice for IT systems, DHS recognizes the importance of strengthening the quality and oversight of this process while incorporating non-IT investments, as appropriate. Although the DHS OCIO does not have authority/jurisdiction over non-IT investments, OCIO will work with DHS partners, as they are identified, to develop targeted policy and effective oversight. Specifically, on August 14, 2023, OCIO initiated an integrated project team to determine whether Instruction Guide 102-02-002, "DHS Instruction Guide Operational Analysis Guidebook," dated March 24, 2016, will be updated as a whole or broken out into a separate instruction and a separate implementing guidebook. Additionally, OCIO will work closely with OCFO Cost Analysis Division to include in Instruction 102-02-002 life cycle cost estimation guidance as noted in this recommendation. Estimated Completion Date (ECD): September 30, 2024.

Recommendation 2: Issue an Instruction Manual for conducting an Operational Analysis.

Response: Concur. DHS OCIO will update OA instructions and guidance for IT investments and is currently working with DHS partners to address OAs for non-IT investments. Non-IT OA governance will either be included in 102-02-002 updates as previously discussed, or in a new governance document. Upon completion of all updates or new instructions, DHS OCIO, along with DHS partners as deemed appropriate, will work with all applicable IT and non-IT investments to ensure compliance. ECD: September 30, 2024.

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Recommendation 3: Require the Coast Guard's Nationwide Automatic Identification System [NAIS] program to implement an effective corrective action plan to identify (1) the root cause of the performance deficiencies and (2) the steps needed to meet the performance measure baselines identified in the Acquisition Program Baseline.

Response: Concur. Coast Guard's Program Management Office (CG-682) worked with the System Sponsor Representative to implement an effective corrective action plan to identify the root cause of performance deficiencies and the steps needed to meet performance measure baselines. The corrective action plan resulted in the creation of two projects to reach the established key performance parameters: (1) Backend Modernization, created April 15, 2022; and (2) Base Station Replacement, created June 1, 2022. Currently, both projects are being monitored by DHS OCIO through the Program Health Assessments office.

By replacing obsolete hardware and software, Backend Modernization will provide a full transmission capability that is not currently being met with the existing NAIS, and is estimated to be complete by June 28, 2024. Base Station Replacement will replace obsolete hardware that does not allow for the full transmission of safety messages, and is anticipated to be complete by September 2026. Further details of this effort include:

Actions	ECD
Identify replacement NAIS Very High Frequency Base Station radio and start National Telecommunications and Information Administration (NTIA) certification.	March 29, 2024
Complete NTIA certification.	October 31, 2024
Start multi-year replacement project.	November 29, 2024
Complete replacement of approximately 60 (45 percent) base stations.	September 30, 2025
Complete replacement of 134 (100 percent) base stations.	September 30, 2026

Overall ECD: September 30, 2026.

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Appendix B
Instances of Component OA Non-Compliance with OMB Circular No. A-11

Component	System in Sustainment	Cost	Performance
CBP	Border Patrol Enforcement System	N	N
CBP	Tactical Communication Modernization	N	Y
CBP	TECS Modernization	N	N
Coast Guard	Nationwide Automatic Identification System*	N	Y
Coast Guard	Rescue 21	N	N
FEMA	Logistics and Supply Chain Management System	N	N
ICE	Student and Exchange Visitor Information System	N	Y
ICE	TECS Modernization	Y	Y
TSA	Electronic Baggage Screening Program	N	N
TSA	Technology Infrastructure Modernization	N	Y
USCIS	Transformation	N	N
USCIS	Verification Modernization	N	N
Total Instances of Non-Compliance**		**11**	**7**

Source: DHS OIG analysis of cost and performance issues identified in FY 2021 OAs

*Did not implement a corrective action plan for identified deficiencies in OA

** As indicated in the report, non-compliance can indicate instances in which OAs reported inaccurate, outdated, or incomplete information to assess a system's cost or performance.

Key:	Y=assessed cost or performance
	N=did not assess cost or performance

Appendix C
Comparison of Variances in Cost When Using Life Cycle Cost Estimate vs. Budget as Baseline for FY 2021 Costs ($M)

System	Life Cycle Cost Estimate Baseline (A)	Congressional Budget Justification (B)	Actual O&M Costs (C)	Variance Between A & C	Variance Between B & C
CBP Tactical Communication Modernization	$42.39	$23.76	$23.74	-44%	0%
TSA Electronic Baggage Screening Program	$120.24	$248.44	$227.48	89%	-8%
TSA Technology Infrastructure Modernization	$66.22	$74.66	$84.19	27%	13%
USCIS Transformation	$89.28	$71.80	$69.10	-23%	-4%
USCIS Verification Modernization	$134.65	$155.82	$136.01	1%	-13%

Source: DHS OIG analysis of cost baselines used to assess O&M costs

Appendix D
Programs That Inaccurately Reported Cost Variance in OAs

System in Sustainment	OA Stated Cost Variance	OIG Analysis of Cost Variance
CBP Border Patrol Enforcement System	0.70%	3%
CBP TECS Modernization	4.89%	12%
FEMA Logistics and Supply Chain Management System	Did not exceed 10% variance allowance	-13%
ICE Student and Exchange Visitor Information System	Did not exceed 10% variance allowance	-42%

Source: DHS OIG analysis comparing cost variances stated in OA vs. actual variance calculated

**Appendix E
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