



Office of Inspector General

OFFICE OF CYBER
ASSESSMENTS AND DATA
ANALYTICS

AUDIT REPORT

PROGRESS IS NEEDED TO SUPPORT THE
DEPARTMENT OF ENERGY'S INTEGRATION OF
ARTIFICIAL INTELLIGENCE INTO INTELLIGENCE
ACTIVITIES

DOE-OIG-25-07
DECEMBER 2024



Department of Energy
Washington, DC 20585

December 9, 2024

MEMORANDUM FOR THE SECRETARY

SUBJECT: Audit Report: *Progress Is Needed to Support the Department of Energy's Integration of Artificial Intelligence Into Intelligence Activities*

The attached report discusses our review of the integration of artificial intelligence (AI) into intelligence activities in accordance with the Intelligence Authorization Act for Fiscal Year 2023. Under the Intelligence Authorization Act for Fiscal Year 2023, the Department of Energy is primarily responsible for 2 of 13 requirements. However, we found that the Department only met one of those requirements. It was unable to meet most of the remaining 11 requirements until actions were taken by the Director of National Intelligence. For instance, the Department was waiting on the Director of National Intelligence to establish AI acquisition and use policies and procedures, and establish plans and guidance for certification of AI systems and recruitment, retention, and training of personnel working with AI. While the Office of Intelligence and Counterintelligence has been participating in Department working groups, it must ensure an appropriate balance to governance that considers implementation of Department guidance and the requirements of the Intelligence Authorization Act for Fiscal Year 2023.

This report contains three recommendations that, if fully implemented, should improve the Office of Intelligence and Counterintelligence's efforts to integrate AI into its operations. We made recommendations to expedite the creation of a required report to Congress on efforts to implement AI to optimize internal workflows, focus on funding needs to fully implement AI, and ensure that all officials are trained and knowledgeable about AI concepts and application. Management concurred with our recommendations.

We conducted this audit from February 2024 through October 2024 in accordance with generally accepted government auditing standards.

We appreciated the cooperation and assistance received during this audit.

A handwritten signature in black ink, appearing to read "Teri L. Donaldson".

Teri L. Donaldson
Inspector General

cc: Deputy Secretary
Chief of Staff
Director, Office of Intelligence and Counterintelligence
Chief Information Officer

DOE-OIG-25-07



Department of Energy Office of Inspector General

Progress Is Needed to Support the Department of Energy's Integration of Artificial Intelligence Into Intelligence Activities

(DOE-OIG-25-07)

WHY THE OIG PERFORMED THIS AUDIT

The Intelligence Authorization Act for Fiscal Year 2023 (Act) contains several requirements for the Director of National Intelligence (DNI) and Federal intelligence agencies to implement artificial intelligence (AI) capabilities into intelligence operations. This includes creating policies, standards, guidance, and implementation plans, and reporting to Congress. The Act also requires associated Offices of Inspector General to conduct audits of the implementation of those requirements within 2 years of the Act's enactment.

We conducted this audit to determine the actions taken and/or barriers impacting the Department of Energy's integration of AI into its intelligence activities.

What Did the OIG Find?

The Act established requirements for Federal intelligence organizations, including the Department's Office of Intelligence and Counterintelligence (Intelligence), to implement AI capabilities. However, of 13 requirements identified in the Act, only 1 had been implemented by Intelligence. The Department cannot implement 11 of the remaining 12 requirements until the DNI takes action to create policies, other guidance, and authorities for intelligence organizations. To its credit, Intelligence had taken positive steps toward implementing AI, such as planning for several AI technologies and appointing a dedicated official to oversee all AI efforts. Without required actions completed by the DNI, Intelligence is limited in the actions that can be taken.

What Is the Impact?

Although Intelligence is awaiting guidance from the DNI before it can complete most of the Act's requirements, there are still many risks associated with AI technologies to which Intelligence could be exposed. For instance, Intelligence advised us about internal difficulties within its control, such as addressing funding resources and human capital needs, focusing on aging information technology infrastructure, and creating policies and plans for implementing AI. In addition, it is important that Intelligence plan for and implement AI technologies with defined and clear "guard rails" in accordance with recently issued Federal guidance and ethical standards.

What Is the Path Forward?

To address the issues identified in this report, we made three recommendations that, if fully implemented, should improve Intelligence's efforts to integrate AI into its operations. We made recommendations related to reporting to Congress on efforts to implement AI, focusing on funding needs to fully implement AI, and ensuring that all officials are trained and knowledgeable about AI concepts and application.

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Background and Objective

Background

The Intelligence Authorization Act for Fiscal Year 2023 (Act) was enacted on December 23, 2022, as part of the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023. It contains several requirements with deadlines for Federal intelligence organizations to implement artificial intelligence (AI)¹ capabilities, such as creating policies, standards, and guidance; designating lead officials; creating implementation plans; creating status reports to Congress; determining workforce needs; certifying and improving commercial software; and other activities. The Act also requires Offices of Inspector General to conduct audits of the implementation of those requirements to be completed within 2 years of the Act's enactment.

The Office of the Director of National Intelligence integrates all national and homeland security intelligence in defense of the homeland and in support of United States national security interests. It serves as the head of the U.S. Intelligence Community, which consists of a coalition of 18 agencies and organizations within the executive branch of the Federal Government that work both independently and collaboratively to gather and analyze the intelligence necessary to conduct foreign relations and national security activities. Under the Act, the Director of National Intelligence (DNI), in consultation with the heads of the elements of the intelligence community, is responsible for the establishment and reviews of policies, standards, and procedures relating to the acquisition, adoption, development, use, coordination, and maintenance of AI capabilities and associated data, frameworks, computing environments, and other enablers by the intelligence community to accelerate and increase the adoption of AI capabilities within the intelligence community.

The Department of Energy's Office of Intelligence and Counterintelligence (Intelligence) is part of the U.S. Intelligence Community and is responsible for all intelligence and counterintelligence activities throughout the Department, including nearly 30 offices nationwide. Intelligence protects vital national security information and technologies, representing intellectual property of incalculable value. Intelligence's contribution to national security is the ability to leverage the Department's scientific and technological expertise in support of policymakers as well as national security missions in defense, homeland security, cybersecurity, intelligence, and energy security.

Report Objective

We conducted this audit to determine the actions taken and/or barriers impacting the Department's integration of AI into its intelligence activities. Our scope was limited to

¹ According to the Act, the term "artificial intelligence" means a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. AI systems use machine and human-based inputs to perceive real and virtual environments, abstract such perceptions into models through analysis in an automated manner, and use model inference to formulate options for information or action.

Department-funded AI related to Department-managed intelligence activities. It did not include AI technology developed by the Department's National Laboratories funded by other intelligence agencies for their use, such as through Strategic Intelligence Partnership Projects.²

² Strategic Partnership Projects are work conducted by the Department's National Laboratories, plants, and sites for other Federal agencies and non-Federal customers on a 100 percent reimbursable basis. Strategic Intelligence Partnership Projects are the same but are specific to the Intelligence Community.

Results of Review

Our test work found that Intelligence was using AI from other agencies and planned to implement some of its own AI technologies. Intelligence had also taken other positive actions regarding the use of AI technology. While Intelligence had implemented one of the Act's requirements, much of the work was not complete at the time of our review, and most deadlines for requirements had passed. For most of the implementation efforts not completed, Intelligence officials noted that they were awaiting guidance or contact for coordination from the DNI, which had not happened at the time of our review. In fact, only one of the requirements not completed was required to be independently implemented by Intelligence. This related to creating a report to Congress on the efforts to develop, acquire, adopt, and maintain AI to optimize internal workflows. For all other efforts, the DNI was assigned as the lead for completing the requirement and was to complete those efforts in coordination with other elements of the intelligence community such as Intelligence. Subsequent to our field work, a Department official advised us that the DNI had recently acted on some of the Act's requirements, including circulating a draft policy on AI and issuing data calls for several action items.

A summary of the Department's implementation status of the Act's requirements is included in Appendix 1.

Efforts to Implement Artificial Intelligence Technologies

Intelligence officials described efforts they were taking to implement AI technology that were not explicit requirements of the Act. Specifically, Intelligence:

- Proactively hired an official to oversee the implementation of AI prior to it becoming a requirement of the Act.
- Used AI from other agencies and planned to implement several AI technologies in support of completing its intelligence missions.
- Informally established a Data Science Working Group in 2019 and formally chartered it in 2021. The Working Group's objective is to guide Intelligence to accelerate the adoption of digital analytics transformation, identify mission use cases, build a coherent data ecosystem, acquire and implement the appropriate AI tools, reshape the workforce, and adapt new workflow processes.
- Participated in the Department's Cyber and Information Technology/Operational Technology Executive Council and biweekly AI Working Group, which has discussed AI governance across the Department.
- Recently started participating in a multi-agency council to advise and support the DNI on strategies and policies to govern the intelligence community AI portfolio; enable the use of AI capabilities while managing risk; foster a culture of responsible, lawful, and ethical AI development; and champion innovation and tradecraft transformation.

- Developed intelligence on the state of AI technology worldwide specifically to produce foreign intelligence analysis on a range of strategically important emerging and disruptive technologies.
- Planned for data interoperability and metadata standards to facilitate enterprise data management and ethical AI development in cooperation with the DNI and a large data management project in the National Nuclear Security Administration.
- Collaborated with the National Nuclear Security Administration to enable work with restricted data on accredited computer systems that host AI models and systems.

Intelligence Authorization Act for Fiscal Year 2023 Requirements

The Act includes 13 requirements,³ 2 of which are the Department's direct responsibility. The remaining 11 requirements are the DNI's responsibility, with participation from intelligence agencies. We concluded that Intelligence had completed actions for one of its two direct responsibilities. However, officials had not completed actions for the other responsibility. Further, the Department generally had not been solicited for input or participation by the DNI for the remaining 11 responsibilities that were to be collaborative efforts.

While not a requirement of the Act, we determined that Intelligence had created an appropriate definition of AI to be used in its operations. The definition of AI was in agreement with the definition used by the Act and 15 United States Code § 9401.⁴ A senior Intelligence official also stated that Intelligence defined AI based on the Department's *Generative Artificial Intelligence Reference Guide* (August 2023), which defines AI as a field of computer science that focuses on creating intelligent machines capable of tasks requiring human intelligence.

Designated Leads

Intelligence identified and designated a senior official to serve as the lead for overseeing and coordinating efforts relating to AI as required by the Act. Responsibilities include the integration of the acquisition, technology, human capital, and financial management aspects necessary for the adoption of AI solutions. The Intelligence Director appointed a Chief AI Officer on February 9, 2024, and granted the oversight and coordination responsibilities designated in the Act.

Reports on Integration of Artificial Intelligence

Although required by the Act, Intelligence had not created and sent a report to Congress on the efforts to develop, acquire, adopt, and maintain AI to improve intelligence collection and analysis and optimize internal workflows. While the report was due by June 21, 2023,

³ There are more than 13 specific requirements in the Act related to implementing AI in intelligence activities; however, our audit did not include all the requirements. Our audit only included those requirements applicable to Intelligence.

⁴ The Act states that the definition of AI for its purposes is defined in United States Code § 9401. United States Code § 9401 defines AI as a machine-based system capable of making predictions, recommendations, or decisions that affect real or virtual environments in response to a given set of human defined-objectives.

Intelligence officials indicated that they had started the process of collecting the necessary information to create the report. However, they had not submitted the report. The report was to include a description of the authorities relating to the use of AI; a list of any resource or authority necessary to accelerate the adoption of AI solutions, including commercial products or personnel authorities; a description of roles, responsibilities, and authorities for accelerating the adoption of AI; and the application of policies and principles to support policies and procedures created by the DNI. At the time of our review, Intelligence officials estimated that they would have the report completed in October 2024.

Additional Transaction Authority

The Intelligence Director had been delegated special authority by the DNI for acquisition of prototype projects; however, the authority had only been recently acquired and the Director had not had an opportunity to use or further delegate the authority at the time of our review. In accordance with the Act, element heads were authorized to assign the execution authority for additional transaction authority⁵ to officials within their elements who are accountable for prototype projects and fundamental, applied, or advanced research activities, or adoption thereof. The DNI granted the heads of Intelligence Community elements “Other Transaction Authority” on February 28, 2024, to conduct prototype projects and fundamental, applied, or advanced research supporting intelligence activities. This delegation of authority to engage in “Other Transactions” was subject to restrictions and provisions, including that the total value of transactions and agreements (excluding contracts, cooperative agreements, and grants) for the execution of basic, applied, and advanced research projects and prototype projects shall not exceed \$75 million per agreement. In addition, starting in 2024, every Intelligence Community element must submit a report to the Senior Procurement Executive of the Intelligence Community by October 30 of each year that details the utilization of the “Other Transactional Authority” during the previous fiscal year (FY). Each report may detail transactions that have been granted follow-on production contracts in accordance with “Other Transactional Authority” or another acquisition authority accessible to the intelligence community.

Artificial Intelligence Policies, Standards, and Guidance

Intelligence had not established policies, standards, and procedures related to the acquisition, adoption, development, use, coordination, and maintenance of AI capabilities and associated data, frameworks, computing environments, and other enablers. Intelligence officials told us they were unaware of whether guidance from the DNI had been created for standards and practices related to the acquisition, adoption, development, use, and maintenance of AI capabilities. Officials also told us that until the DNI creates such standards and practices, they were utilizing the DNI’s *Intelligence Community Data Strategy 2023-2025* and *The Augmenting Intelligence using Machines Initiative*, which is a strategy for augmenting intelligence using machines where appropriate. Intelligence personnel indicated that no initiatives were underway related to developing internal policies, standards, and procedures. Rather, officials noted that Intelligence will continue to consult industry AI ethics frameworks, National Institute of

⁵ According to the Act, additional transaction authority allows for transactions that are not restricted only to basic, applied, and advanced research projects and prototype projects. This is similar to less restrictive additional transaction authorities of the Transportation Security Administration and the National Aeronautics and Space Administration.

Standards and Technology guidance, and *The Generative Artificial Intelligence Reference Guide* for the Department. While Intelligence has been participating in the Department’s Cyber and Information Technology/Operational Executive Council and AI Working Group, it must ensure an appropriate balance to governance that considers implementation of Department guidance and the requirements of the Act.

Office of Commercial Integration Implementation Plan

Intelligence had not yet established an “Office of Commercial Integration” and was awaiting direction from the DNI to ascertain whether this constitutes a requirement unique to the Department. As required by the Act, a centralized office designated as the “Office of Commercial Integration” was needed to be operational by December 23, 2023, to aid individuals in the intelligence community in submitting bids for contracts and procuring commercial products and services. The development of the strategy was the joint responsibility of the DNI and other supporting components such as Intelligence.

Emerging Technologies Transition Projects

During the budget formulation process, Intelligence had not submitted to the DNI a prioritized list of no more than 10 eligible projects to be considered for designation as Emerging Technology Transition Projects. This list was to be provided annually after the DNI issued guidance on submitting a list. While these guidelines were due by June 21, 2023, the DNI is not expected to issue the guidance until 2025. Intelligence officials confirmed that they had not received guidance from the DNI about providing a list of eligible projects but planned to submit a list when the guidance is issued.

Authorizations to Operate

Intelligence had not participated in the development and submission of a protocol setting forth policies and procedures relating to authorizations to operate for the Department of Defense or intelligence community systems held by industry providers. In coordination with the Secretary of Defense and the heads of the elements of the intelligence community, the Act requires the DNI to develop the protocol. The Act also requires each head of an intelligence community element to designate an official to implement and oversee the protocol. The protocol was due by June 21, 2023. Intelligence officials stated that they had not received a protocol from the DNI nor did they have community systems held by industry partners for any of their AI. Intelligence officials added that they had designated an Authorizing Official for their systems and would utilize existing practices for authorization of systems.

Sensitive Compartmented Information Facility Access

Intelligence had not consulted on the creation of a plan to expand sensitive compartmented information facility access to contractors of small emerging technology companies. In consultation with the Secretary of Defense and the heads of such other elements of the intelligence community, the Act requires the DNI to create the plan. The plan was due by June 21, 2023. Intelligence officials advised they had not been informed that they were identified as a

consulting agency for this requirement and did not have plans to expand sensitive compartmented information facility access in the Department because they were having a difficult time keeping up with the current demand for access.

Information Technology and Software Certification

Intelligence officials informed us they had not received guidelines from the DNI for information technology (IT) and software certification. The Act states that prior to the date on which the head of an element of the intelligence community enters into, renews, or extends a contract for the acquisition of an IT or software system, the head shall certify to the DNI that the technology or software system is the most up-to-date version, compatible with integrating new and emerging technologies, and reviewed for superior products that meet the requirements. The DNI may exempt elements of the intelligence community, as appropriate, from the requirements if meeting such requirements may pose security or operational risks. Intelligence officials indicated that they had not contracted for any of their systems, and that all their systems were developed in-house. Therefore, this requirement did not apply.

Report on Workforce Needs Related to Science, Technology, Engineering, and Mathematics

Intelligence had not developed plans and coordinated with other members of the intelligence community on workforce needs related to science, technology, engineering, mathematics, and related areas. According to the Act, the DNI, in coordination with the heads of human capital from each element of the intelligence community, shall: (1) develop a plan for recruitment and retention of personnel to positions whose primary duties involve the integration, maintenance, or use of AI; (2) develop a plan for the review and evaluation, on a continuous basis, of the expertise necessary to accelerate the adoption of AI and other emerging solutions; and (3) coordinate and share information and best practices relating to recruitment and retention in each intelligence element and across the intelligence community. Intelligence also had not provided information to the DNI for a related Act requirement for a report to Congress on a description of the number and types of personnel in work roles whose primary official duties include AI. The report was due by January 1, 2024. Intelligence officials indicated that they had not received requests from the DNI for the required plans or report.

Emerging Technology Education and Training

Intelligence did not participate in the establishment of a training curriculum for acquisition officials in the intelligence community focused on improving the understanding and awareness of contracting authorities and procedures for acquisition of emerging technologies. Creating the training curriculum was the responsibility of the DNI and the Secretary of Defense. Intelligence elements were to participate only if it was determined necessary by the DNI and Secretary of Defense. The training curriculum was due by September 19, 2023. Intelligence officials stated they had not been solicited by the DNI for participation in establishing the training curriculum.

Improvements to Use of Commercial Software

Intelligence was not asked to consult on the establishment of policy on procurement of commercial software products by the intelligence community using standardized terminology and in accordance with acquisition and operation best practices reflecting modern software as a service capability. Creating the policy was the responsibility of the DNI in consultation with intelligence elements. The policy was due by December 23, 2023. Intelligence officials stated that the DNI had not provided such a policy and advised that the multi-agency working group previously described in this report agreed that this was something they could address.

Code-Free Artificial Intelligence Enablement Tools Policy

Intelligence had not participated in developing a policy to promote the intelligence community-wide use of code-free AI enablement tools. According to the Act, the DNI is responsible for drafting a potential policy with participation from other specified agencies as well as members of the intelligence community, if deemed necessary to participate. The draft policy was due by December 23, 2023. Intelligence officials indicated that they had not received such a policy from the DNI and added that this was another issue that could be addressed by the multi-agency working group.

Artificial Intelligence Risks and Path Forward

While Intelligence was awaiting guidance on implementing most aspects of the Act's requirements, we identified certain risks to Intelligence which could impact its ability to implement requirements and additional AI technologies in the future. In particular, Intelligence officials informed us that they had internal difficulties in implementing AI technologies due to limited funding, lack of human capital, and outdated systems that prevent rapidly implementing new technologies.

Intelligence officials stated that the FY 2025 budget was completed without the resources to fully implement AI. Therefore, it will not be possible to achieve necessary funding levels until at least the FY 2026 budget and appropriations cycle. The Intelligence AI Officer also told us that the program could progress if it had staff with the expertise to implement AI. Officials told us that they had identified some positions and technologies but had not formalized needs in a gap analysis or similar document to highlight the funding and resources necessary to support AI implementation needs. This is important not just because of considerations in implementing AI, but also because Intelligence is operating outdated IT infrastructure. Intelligence officials told us that they had created an IT implementation plan that defines the network and needs; however, the plan did not account for AI. In addition, the Intelligence Chief Information Officer advised that they did not have any experience implementing AI and that their primary focus has been securing the program's network. Therefore, Intelligence did not establish a policy specific to AI and would instead use traditional controls such as configuration management applicable to traditional IT. The Intelligence Chief Information Officer also noted that Intelligence would follow guidance and requirements set forth by the DNI when they were created. Therefore, we concluded that training specific to AI was necessary for the Chief Information Officer as well as other Intelligence officials. Notably, Intelligence has hired a vendor for training needs, including

AI; however, this effort was recent, and courses are still being developed. While this is a positive step forward, Intelligence will need to ensure training is completed and appropriate courses are developed.

It is also critical that planning and implementing AI is conducted in recognition of appropriate safeguards. Multiple recent sources of Federal guidance emphasized this importance. For example, Office of Management and Budget Memorandum M-24-10, *Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence* (March 2024), directs that while agencies will realize significant benefits from AI, they must also manage a range of risks from the use of AI. The Memorandum also states that because AI is deeply interconnected with other technical and policy areas, including data, IT, security, privacy, civil rights and civil liberties, customer experience, and workforce management, AI Officers must work in close coordination with existing responsible officials and organizations within their agencies. In addition, Executive Order 14110, *Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence* (October 2023), states that responsible AI use has the potential to help solve urgent challenges while making our world more prosperous, productive, innovative, and secure. However, irresponsible use could exacerbate societal harms, such as fraud, discrimination, bias, and disinformation; displace and disempower workers; stifle competition; and pose risks to national security.

Recommendations

To implement portions of the Act within Intelligence's control, we recommend that the Director, Intelligence:

1. Expedite the creation and submission of the report to Congress on the efforts to develop, acquire, adopt, and maintain AI to optimize internal workflows;
2. Continue to focus on funding needs, including those related to human capital, and highlighting those needs to implement all aspects of the Act and full implementation of AI into intelligence operations; and
3. Ensure that all appropriate officials are trained and knowledgeable about AI concepts and application and the AI technologies operating on Intelligence systems.

Management Comments

Management concurred with each of the three recommendations in our report. Management noted that it is working on a written report on efforts to develop, acquire, adopt, and maintain AI systems to optimize internal workflows and plan to submit the report to Congress prior to February 28, 2025. Management also noted that it is developing initial AI-related funding requests through the FY 2026 budget request process. Further, management stated that it will provide regular AI training opportunities for the entire Intelligence staff and positions responsible for AI deployment and safety.

Office of Inspector General Response

Management's comments and planned corrective actions are responsive to our recommendations. Management's comments are included in Appendix 4.

Appendix 1

Intelligence Authorization Act for Fiscal Year 2023 Implementation Status of Requirements

Agency Requirement (Section of Act)	Primary Responsibility of Department of Energy	Fully Implemented
Identify and designate a senior official to serve as the designated lead for overseeing and coordinating efforts relating to artificial intelligence (AI). (6702(b) and 6703(a))	Yes	Yes
Submit to defined congressional committees a report on the efforts to develop, acquire, adopt, and maintain AI to improve intelligence collection and analysis and optimize internal workflows. (6721(a))	Yes	No
Delegate authorities for additional transaction authorities to carry out basic, applied, and advanced research projects and prototype projects in support of intelligence activities. (6711(b))	No	Yes ⁶
Establish polices, standards, and procedures related to the acquisition, adoption, development, use, coordination, and maintenance of AI capabilities and associated data, frameworks, computing environments, and other enablers. (6702(a))	No	No
Develop a plan for establishment of a centralized office or offices within each element of the intelligence community to be known as the “Office of Commercial Integration.” Establish a publicly accessible website that includes	No	No

⁶ As noted in our report, although the Director of National Intelligence (DNI) was responsible to delegate the authority for additional transaction authorities, the Office of Intelligence and Counterintelligence (Intelligence) will then need to use the additional authority in its operations. Intelligence had only very recently obtained the delegation at the time of our review and, therefore, had not used the authority.

Appendix 1

relevant information necessary for offerors or contractors to conduct business with each element of the intelligence community. (6712(a) and 6712(b))		
Submit to the DNI a list of no more than 10 eligible projects per year to be considered for designation as Emerging Technology Transition Projects. (6713(b))	No ⁷	No
Develop and submit to appropriate committees of Congress a single protocol setting forth policies and procedures relating to authorizations to operate for the Department of Defense or intelligence community systems held by industry providers. (6714(b))	No	No
Develop a plan to expand access by contractors of small emerging technology companies to sensitive compartmented information facilities for the purpose of providing such contractors with a facility to securely perform work. (6715(a))	No	No
Develop guidance for certification of information technology or software systems. (6718(a))	No	No
Develop a plan for recruitment and retention of personnel to positions whose primary duties involve the integration, maintenance, or use of AI; develop a plan for the review and evaluation, on a continuous basis, of the expertise necessary to accelerate the adoption of AI and other emerging solutions; and coordinate and share information and best practices relating to recruitment and retention in each intelligence element and across the intelligence community. (6723(a))	No	No

⁷ Intelligence cannot submit a list of projects until the DNI creates a pilot program to more effectively transition promising prototypes or products in a developmental stage to a production stage through designating eligible projects as “Emerging Technology Transition Projects.”

Appendix 1

Establish a training curriculum for acquisition officials in the intelligence community focused on improving the understanding and awareness of contracting authorities and procedures for acquisition of emerging technologies. ⁸ (6732(a))	No	No
Establish a policy on procurement of commercial software products by the intelligence community using standardized terminology and in accordance with acquisition and operation best practices reflecting modern software as a service capability. (6741(a))	No	No
Draft a potential policy to promote the intelligence community-wide use of code-free AI enablement tools. ⁹ (6742(a))	No	No

⁸ Intelligence would participate in establishing a training curriculum only if designated as a participating agency by the DNI and Secretary of Defense.

⁹ Intelligence would participate in drafting a policy for code-free AI enablement tools only if designated as a participating agency by the DNI.

Commonly Used Terms

Artificial Intelligence	AI
Department of Energy	Department
Director of National Intelligence	DNI
Fiscal Year	FY
Information Technology	IT
Intelligence Authorization Act for Fiscal Year 2023	Act
Office of Intelligence and Counterintelligence	Intelligence

Objective, Scope, and Methodology

Objective

We conducted this audit to determine the actions taken and/or barriers impacting the Department of Energy's integration of artificial intelligence (AI) into its intelligence activities.

Scope

The audit was performed from February 2024 through October 2024 at Department Headquarters in Washington, DC. The scope of the audit was limited to the implementation of AI in intelligence requirements in the Intelligence Authorization Act for Fiscal Year 2023 (Act). Our audit did not include all requirements in the Act. We used audit steps provided by the Director of National Intelligence Office of Inspector General to review the primary requirements of the Act as prescribed to the Director of National Intelligence Office of Inspector General in meetings with congressional committees. Our review also did not include AI technology developed by the Department's National Laboratories but funded by other intelligence agencies for their use under Strategic Intelligence Partnership Projects.¹⁰ The audit was conducted under Office of Inspector General project number A24TG004.

Methodology

To accomplish our objective, we:

- Reviewed applicable laws, regulations, and directives related to the audit;
- Held discussions with Federal personnel from the Office of Intelligence and Counterintelligence; and
- Reviewed relevant documents related to the implementation of AI in Office of Intelligence and Counterintelligence systems.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards required 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. Accordingly, we assessed internal controls and compliance with laws and regulations necessary to satisfy the audit objective. In particular, we assessed the following internal control components and underlying principles significant to the audit objective: design control activities, implement control activities, and

¹⁰ Strategic Partnership Projects are work conducted by the Department's National Laboratories, plants, and sites for other Federal agencies and non-Federal customers on a 100 percent reimbursable basis. Strategic Intelligence Partnership Projects are the same but are specific to the Intelligence Community.

Appendix 3

design activities for information systems. Because our review was limited, it would not have necessarily disclosed all internal control deficiencies that may have existed at the time of our audit. We did not rely on computer-processed data to satisfy our objective.

Office of Intelligence and Counterintelligence management officials waived an exit conference on December 5, 2024.

Management Comments



Department of Energy

Washington, DC 20585

November 19, 2024

MEMORANDUM FOR TERI L. DONALDSON
 INSPECTOR GENERAL

FROM: *Jay A. Tilden*
 JAY A. TILDEN
 DIRECTOR
 OFFICE OF INTELLIGENCE AND COUNTERINTELLIGENCE

SUBJECT: Progress Is Needed to Support the Department of Energy's
 Integration of Artificial Intelligence Into Intelligence Activities
 (A24TG004)

Thank you for the opportunity to review and comment on the subject draft report. The Office of Intelligence and Counterintelligence appreciates the auditors' audit work, concurs with the three recommendations, and provides planned follow-on actions to be taken (see attachment).

If you have any questions regarding this response, please contact Nancy Checklick, Chief of Staff, Office of Intelligence and Counterintelligence, 202-586-1789.

Enclosure

Enclosure

Management Response

OIG Draft Report: Progress Is Needed to Support the Department of Energy's Integration of Artificial Intelligence Into Intelligence Activities (A24TG004)

Recommendation # 1: To implement portions of the Act within Intelligence's control, we recommend that the Director, Office of Intelligence and Counterintelligence expedite the creation and submission of the report to Congress on the efforts to develop, acquire, adopt, and maintain AI to optimize internal workflows.

DOE Response: Concur

A written report on efforts by the Office of Intelligence and Counterintelligence to develop, acquire, adopt, and maintain AI systems to optimize internal workflows will be submitted to Congress prior to Feb 28, 2025. This report will be drafted by the Chief AI Officer (CAIO) and coordinated with all stakeholders within the Office of Intelligence and Counterintelligence, including the Chief Information Officer (CIO); the Chief Technology Officer (CTO); the Chief Data Officer (CDO); the Civil Liberties, Privacy, and Intelligence Oversight Officer (CLPIO); the Chief of Staff; and the Senior Leadership of the Office.

Estimated Completion Date: Feb 28, 2025

Recommendation # 2: To implement portions of the Act within Intelligence's control, we recommend that the Director, Office of Intelligence and Counterintelligence continue to focus on funding needs, including those related to human capital, and highlighting those needs to implement all aspects of the Act and full implementation of AI into intelligence operations.

DOE Response: Concur

The Office of Intelligence and Counterintelligence is developing initial AI-related funding requests through the FY 2026 budget request process. The Office will identify the resources needed to implement the Office's AI-related strategy. Funding priorities for the Department's FY 2026 budget will be determined by DOE leadership, consistent with direction provided by the Office of Management and Budget to develop the President's budget request.

Estimated Completion Date: Annually, during the planning and formulation phases of the federal budget process.

Recommendation # 3: To implement portions of the Act within Intelligence's control, we recommend that the Director, Office of Intelligence and Counterintelligence ensure that all appropriate officials are trained and knowledgeable about AI concepts and application and the AI technologies operating on Intelligence systems.

DOE Response: Concur

Enclosure

Management Response

OIG Draft Report: Progress Is Needed to Support the Department of Energy's Integration of Artificial Intelligence Into Intelligence Activities (A24TG004)

Ensuring that all appropriate officials are trained and knowledgeable about AI concepts will be an ongoing process for the Office. The Office will continue to provide regular training opportunities for the entirety of the staff through the regular training program and will seek to highlight those training opportunities that speak specifically to AI and machine learning. Office staff that are in positions of responsibility for AI deployment and safety on IN systems, like the CIO, CTO, CDO, and CAIO, will be encouraged to seek training and/or learning opportunities to further their knowledge about AI.

When the Office begins the deployment of any AI system for use in the mission delivery or business processes, the Office will assess the knowledge training necessary for the safe and effective use of that system and identify appropriate mechanisms for training and knowledge acquisition. The Office will conduct those assessments on a continual basis as new AI systems are proposed for adoption and will proactively include any necessary training costs in the total cost estimate for new systems.

Estimated Completion Date: On-going.

FEEDBACK

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