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TO: USDA Subcabinet
Agency Heads
Mission Area Chiefs of Staff
Mission Area Chief Operating Officers
Mission Area Assistant Chief Information Officers
Mission Area Assistant Chief Data Officers
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SUBJECT: Interim Guidance on the Use of Generative Artificial Intelligence at USDA

I. PURPOSE

This memo serves as interim guidance on the U.S. Department of Agriculture’s (USDA’s) use of generative artificial intelligence (AI) while longer-term governance is put into place. Managing AI risk and removing barriers to AI innovation requires stronger AI governance and risk management. If implemented responsibly, Generative AI has the potential to improve operations across the USDA.

II. BACKGROUND

AI is a broad field that has been maturing over decades. Generative AI is a subcategory that is capable of generating new content such as code, images, music, text, simulations, 3D objects, videos, and so on.¹² This differs from “traditional” AI systems that classify (e.g., assigning labels to images), group (e.g., identifying customer segments with similar purchasing behavior), or choose actions (e.g., steering an autonomous vehicle).³ The field of “Generative AI” has rapidly evolved with tools such as ChatGPT, Dall-E, Google Bard, Bing AI, and Resemble-AI able to produce text, images, and audio that are virtually indistinguishable from those created by humans. These Generative AI tools have the potential to greatly improve productivity across many functional areas. Some examples include help desk support, drafting communications, rapidly summarizing large collections of documents, website development, automation, code development/review, and more.

While Generative AI models and tools show promise, there are some concerning characteristics, such as generating misinformation, hallucinations⁴ inaccurate or outdated responses, lack of data privacy protections, and potential misuse. Organizations have the responsibility to recognize both challenges and opportunities when establishing risk-based

¹ https://airc.nist.gov/AI_RMF_Knowledge_Base/Glossary

² <https://www.marktechpost.com/2023/03/21/a-history-of-generative-ai-from-gan-to-gpt-4/>

³ <https://cset.georgetown.edu/article/what-are-generative-ai-large-language-models-and-foundation-models/>

⁴ “Hallucinations” in AI are erroneous responses that sound credible, leading to inaccurate or misleading information (<https://www.gao.gov/products/gao-23-106782>)

guidelines, including the implementation of Generative AI.

Federal agencies are required to ensure that the use of all AI technologies is trustworthy, equitable, and transparent. Executive Order (EO) 13960⁵ instructs agencies to ensure that the use of AI is lawful and respectful of our Nation's values; purposeful and performance-driven; accurate, reliable, and effective; safe, secure, and resilient; understandable; responsible and traceable; regularly monitored; transparent; and accountable. The Blueprint for an AI Bill of Rights⁶ calls for equitable access to programs and protection of civil rights. The National Institute of Standards and Technology (NIST) AI Risk Management Framework recommends agencies implement functions to govern, map, measure, and manage AI to manage risk. The General Services Administration (GSA) Guide for AI in Government recommends agencies have a centralized AI resource to support and enable adoption across the organization. In accordance with these orders, frameworks and guides, USDA is adopting a review process to ensure USDA and relevant stakeholders' interests are protected while promoting the adoption of these new technologies.

III. SCOPE AND APPLICABILITY

- a) This interim guidance applies to all USDA employees and contractors.

This interim guidance does not apply to the use of traditional artificial intelligence⁷ such as classification or prediction models. If you are unsure whether your AI use case is considered “traditional” or “generative”, use the request form in III. e) above for the review board to assist with a decision.

Note, applicable traditional artificial intelligence is still required to be reported through the USDA Artificial Intelligence Inventory semi-annual update.

- b) This interim guidance does not apply to Robotic Process Automation (RPA)⁸ where Generative AI models or tools are *not* being used. If you are unsure whether your RPA use case is using Generative AI, please consult with your Mission Area ACIO.
- c) Agencies may develop and test Generative AI models for approved scientific research projects (where the goal is generalizable peer-reviewed knowledge under an approved research plan) without Review Board approval, with the following clarifications:
- a. Within the first 180 days after issuance of this memo, agencies conducting scientific research will collaborate to develop a standardized process to inventory scientific research projects conducted by USDA or funded through grants, that utilize various forms of artificial intelligence, including but not limited to Generative AI and all scientific research using AI is documented in that inventory.

⁵ <https://www.federalregister.gov/documents/2020/12/08/2020-27065/promoting-the-use-of-trustworthy-artificial-intelligence-in-the-federal-government>

⁶ <https://www.whitehouse.gov/ostp/ai-bill-of-rights/>

⁷ “Traditional AI” refers to artificial intelligence that performs a specific task in response to specific inputs. (<https://www.forbes.com/sites/bernardmarr/2023/07/24/the-difference-between-generative-ai-and-traditional-ai-an-easy-explanation-for-anyone/?sh=66ce7bb3508a>)

⁸ “Robotic Process Automation” is a method for automating tasks using specific rules or logic and structured inputs. (<https://www.usda.gov/rpa/faq>)

- b. Researchers and contractors must comply with applicable laws and regulations, and USDA DRs 1020-006, 1074-001, 3140-001, 3140-002, 3440-003, 3515-002, and 3545-001.
- c. Researchers must first update their project plans and/or data management plans⁹ to clearly identify the use of Generative AI and receive approval from agency program or line management leadership via existing authorities, including the Project Plan Peer Review program.¹⁰
- d. Public release of associated source code and/or data requires approval via existing agency processes.
- e. If any Generative AI tools or models developed for research purposes are considered for non-research uses, the research approval does not apply, and this guidance applies as normal.

IV. INTERIM GUIDANCE

- a) 30 days after issuance of this guidance, an interim Generative AI Review Board (GAIRB) will be established with representation from the USDA Chief Data Officer (CDO)/Responsible AI Official, the Chief Technology Officer (CTO), a Cybersecurity representative, a General Counsel representative, a programmatic equity/DEIA representative, a Civil Rights representative, and two mission area representatives. Membership may be revised as the Board deems necessary or as further guidance is issued.
 - a. Within 90 days after issuance of this guidance, the GAIRB will implement a process for reviewing Generative AI project proposals.
 - b. The GAIRB will meet monthly and make the final decision to approve or reject an AI proposal.
- b) No USDA agency shall pilot, use, or deploy Generative AI tools, infrastructure, or models on the USDA network without prior written approval from the interim GAIRB. Any use cases currently in development or in use at the time of this memo should be paused until reviewed by the GAIRB.
- c) USDA employees and contractors are prohibited from accessing publicly available, third-party Generative AI tools while in their official capacity or on government furnished equipment. Some sites may be blocked by the USDA Chief Information Security Officer (CISO), but some sites might not in this rapidly expanding field. Regardless of whether the website is blocked or not, employees should not use these sites for official purposes or on any other equipment when doing so in the course of their official duties.
- d) USDA employees and contractors are prohibited from using generative AI for language translation and interpretation for the purpose of providing services to USDA applicants and program participants. This use case has been determined to present an unacceptable risk of providing erroneous information about USDA's programs and services.

⁹ <https://www.ars.usda.gov/office-of-scientific-quality-review-osqr/the-ars-research-project-plan-instructions/>

¹⁰ <https://www.ars.usda.gov/office-of-scientific-quality-review-osqr/about-pppr/>

- Exceptions to this prohibition should be submitted to the GAIRB for consideration (see part g).
- e) The submission of data containing PII or non-public information to a public Generative AI tool constitutes a prohibited release of protected information. Employees must report any public release of protected information to your privacy officer.
 - f) Generative AI tools approved for use during official USDA business shall not be used to generate malicious, inappropriate, or illegal material under any circumstances.
 - g) Exception requests to use existing Generative AI tools at USDA will be reviewed on a case-by-case basis by submitting via the [Generative AI Exception Request Form](#). Requests must be submitted with approval from the Mission Area's (MA) Assistant Chief Information Officer (ACIO), in consultation with the MA's Assistant Chief Data Officer (ACDO) and Assistant Chief Information Security Officer (ACISO).
 - h) An interim GAIRB will review exception requests and approve or reject based on the needs of the USDA. A record of decisions will be made available to the Mission Area Assistant Chief Data Officers, Assistant Chief Information Officers, and OCIO Executive Leadership Team.
 - i) If approved for use, USDA-deployed and managed Generative AI tools shall be assessed for an authorization to test or operate. Additional scrutiny, such as impact assessments, independent reviews, and annual reporting, may be required for Generative AI use case requests that:
 - a. handle PII,
 - b. have potentially safety-impacting or rights-impacting uses,
 - c. have privileged access to USDA systems, or
 - d. transfer data to systems that are not authorized to operate by USDA.

V. RESPONSIBILITIES

The Secretary of Agriculture shall:

- a) Direct the heads of USDA MA agencies, and staff offices to work with the Responsible Artificial Intelligence Official (RAIO) to assess GAI needs, and opportunities.

The Deputy Secretary of Agriculture shall:

- a) Periodically review GAI adoption progress and priorities with the Review Board or a board representative.

The Heads of Mission Areas, agencies and staff offices shall:

- a) Ensure that the provisions of this policy are implemented for the initiatives under their control.

- b) Review GAI opportunities within their organization and ensure alignment with program requirements and strategic goals.
- c) Submit requests for GAI use cases using the request form referenced in Section III. f) above.
- d) When required, include GAI use cases in agency AI Inventory submissions.

The USDA's Chief Data Officer shall:

- a) Serve as the USDA's RAIO and appoint delegates as required.
- b) Stand up and chair the interim GAIRB until permanent AI governance is approved and implemented.
- c) Lead the development of the USDA's AI strategy, in consultation with MA and Departmental data and IT leadership and stakeholders.

The USDA's Chief Information Security Officer shall:

- a) Sit on or appoint a representative to the interim GAIRB.
- b) Provide expertise and input on the cybersecurity risks and mitigations for AI tools, applications, and platforms.
- c) Continue to review the USDA's security posture for the use of public Generative AI tools and take appropriate action as necessary.
- d) Modify annual cybersecurity training to include topics related to Generative AI.

The USDA's Chief Technology Officer shall:

- a) Provide expert advice to the USDA IT community on AI-enabling infrastructure.
- b) Work with the Office of the Chief Information Officer (OCIO) and MA leadership on standing up and centralizing cloud infrastructure for the testing and evaluation of AI products.
- c) Identify and prioritize high-impact Generative AI use cases for review.
- d) Lead the development of an AI Playbook and Emerging Technology toolkit to safely accelerate future experimentation and testing of emerging technologies.

The Assistant Secretary for Civil Rights shall:

- a) Sit on or appoint a representative to the interim GAIRB.
- b) Provide expertise, and input on the civil rights risks and mitigations for AI tools, applications, and platforms.

Mission Area ACIO's shall:

- a) Select a representative to sit on the interim GAIRB in consultation with the MA ACDO.
- b) Work with the MA ACDO to identify Generative AI use cases to put forward for consideration, ensure that approved use cases are logged in the AI Use Case Inventory.
- c) Review requests for the use of Generative AI in their MA, in consultation with the ACDO and ACISO and submit approved requests to the interim GAIRB.
- d) Monitor approved Generative AI tools for ongoing compliance with Departmental guidance.

- e) Proactively search for unauthorized use of Generative AI tools within designated area of responsibility.
- f) Work with the MA ACDO to identify Generative AI readiness gaps in the workforce skills, training, data, and processes that require correction and investment.
- g) Provide SME assistance in drafting contracts used to develop Generative AI effectively and in accordance with these guidelines.

USDA Employees shall:

- a) Comply with this guidance and restrict the use of Generative AI tools to internally available solutions when they become available.
- b) Seek approval from the GAIRB for any Generative AI use cases that do not fall under the scientific research exemption.
- c) Report any cases of inappropriate Generative AI output to the GAIRB, in addition to other notification requirements established by other USDA policies.

VI. LOOKING FORWARD

New laws, regulations, and Executive Orders on AI governance are imminent. This interim guidance will remain in effect while this guidance is issued and incorporated at USDA. It is expected that this memo will be replaced with a DR that will take new guidance, plus any feedback on the interim process, into account. We will also look at our Generative AI readiness posture so we can find responsible and cost-effective ways of implementing Generative AI at USDA.

VII. MORE INFORMATION

The field of Generative AI is rapidly changing. Below are some helpful resources to provide more insight into this field and answer many questions.

[AI Bill of Rights](#)

[Executive Order 13960: Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government](#)

[National Defense Authorization Act, Section 238\(g\), Artificial Intelligence Defined](#)

[National Artificial Intelligence Initiative](#)

[GAO Science and Technology Spotlight: Generative AI](#)

[NIST AI Risk Management Framework](#)

[NIST Glossary of AI Terms](#)

[GSA AI Guide for Government](#)