November 20, 2023

INFORMATION

MEMORANDUM FOR THE SECRETARY

FROM: Dr. Dimitri Kusnezov   Mr. Eric Hysen
              Under Secretary for   Chief Information Officer
              Science & Technology   Chief Artificial Intelligence Officer

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Date: 2023.11.20 13:00:45 -05'00'

SUBJECT: **Artificial Intelligence Task Force (AITF) 60 Day Update**

Purpose: In the *DHS Artificial Intelligence Task Force* memorandum dated April 20, 2023, you established the AITF to advance the artificial intelligence across the Department. This memorandum serves as an update on progress toward advancing Artificial Intelligence (AI) across the DHS missions.

Context and DHS Equities: The Department made a public commitment to lean forward in deploying AI tools to enhance Departmental operations and lead the government in the responsible and ethical use of AI. Senior Leadership should understand the AITF's progress as it pertains to furthering the Department's commitment.

Progress Report

The AITF concluded the Discovery and Analysis phase and began the Implementation phase as outlined in the concept of operations. The Task Force collaborated with DHS Components and offices to initiate several pilot projects, including projects based on internet-accessible, commercially available Generative AI/Large Language Models (LLMs) to advance mission capabilities using AI. These pilots will support the Department's understanding of the capabilities, limitations, and risks associated with AI while testing potential solutions. The pilots will also provide real world data and information on how DHS can scale these technologies across the Department.

Notable accomplishments of the AITF include:

- **Creation of Chief AI Officer Role:** DHS announced the first DHS Chief Artificial Intelligence Officer (CAIO) in September 2023. This role will ensure the Department's leadership of technology, strategy, decision-making and resource allocation fully integrate DHS' use of AI.

- **New DHS AI Strategy:** The AITF, including the CAIO, have been working with Policy (PLCY), Privacy (PRIV), and Civil Rights and Civil Liberties (CRCL), to revise the most recent version of the DHS AI Strategy published in December 2020. This updated strategy will be mission-focused and keep pace with recent advancements in AI, especially within the areas of Generative AI, open-source AI models, and the commoditization of traditional AI techniques such as predictive analytics. This strategy will be in alignment with Executive Order 14110 "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence," which was released October 30, 2023, as well as the guidance included in OMB's "Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence (AI)" memo that has been published for public comment.

- **House Hearing on AI:** On September 14, CAIO Eric Hysen served as the DHS witness before a House Committee on Oversight and Accountability Subcommittee on Cybersecurity, Information Technology, and Government Innovation hearing regarding how federal agencies are harnessing AI. In his testimony, CIO Hysen discussed several prominent AI use cases, including keeping fentanyl and other dangerous drugs out of the U.S., assisting law enforcement officers to investigate heinous crimes, and making travel easier and safer. This testimony also focused on highlighting AI use at DHS as responsible, ethical, and safe.

- **The Responsible Use Group (RUG) and Responsible Use Policy**: The RUG meets bi-weekly to ensure projects coordinated by AITF address enterprise risks, including privacy, civil rights, civil liberties compliance, and as well as meeting other organizational requirements. Since its inception in early August, the RUG articulated goals and a scope, and began work with stakeholders to define what responsible use means in an organization like DHS. The meetings alternate between working sessions providing oversight advice and support to AITF projects, and guest speakers that provide insight on how to ensure AI implementation meets responsible use goals. Additionally, the AI Policy Working Group (AIPWG) started initial planning stages to implement the requirements in the "DHS Policy Statement 139-06, *The Acquisition and Use of Artificial Intelligence and Machine Learning Technologies by DHS Components*" Policy Statement, to further advance the aims of section 7224(b) of the FY 2023 National Defense Authorization Act.

- **Facial Recognition/Face Capture Directive:** On September 11, 2023, the Under Secretary for Management issued a Directive and Instruction on the "Use of Face Recognition and Face Capture Technologies." This was accomplished in consultation with PRIV, CRCL and other offices. This Directive requires that all uses of face recognition and face capture technologies in the Department will be thoroughly tested and reviewed to ensure there is no unintended bias or disparate impact in accordance with national standards. Review of existing DHS facial recognition applications has begun, and new uses will be subject to rigorous review prior to implementation.

- **Commercial Generative AI Use Training:** To implement the "Use of Commercial Generative Artificial Intelligence Tools," Policy Statement 139-07, OCIO, in consultation with PRIV, CRCL and other offices with equities in the use of this technology, created end user training on the acceptable use of Generative AI. This includes "how to" information and advising users of

potential risks stemming from the tools' limitations and anticipated behaviors. OCIO held an internal soft launch of this commercial generative AI webinar training in September and presented the training and fielded questions in the October 10 AITF-RUG meeting. The AITF is also finalizing a list of conditionally approved tools, and is including a process for requesting, prioritizing, and approving new tools.

- **AI Pilot Program Solicitation:** The AITF announced a DHS-wide AI Pilot Program solicitation in August 2023 to test the use of AI (with an emphasis on Generative AI/Large Learning Models) to support the DHS mission. Upon selection of 3-4 pilots, the AITF will allocate limited funds to support these AI pilot projects. 34 total solicitations were received from U.S. Customs and Border Protection (CBP), Cybersecurity and Infrastructure Security Agency (CISA), Federal Emergency and Management Agency (FEMA), Federal Law Enforcement Training Centers (FLETC), Office of Intelligence & Analysis (I&A), U.S. Immigration and Customs Enforcement (ICE), Office of the Chief Information Officer (OCIO), Science and Technology Directorate (S&T), Transportation Security Administration (TSA), and U.S. Citizenship and Immigration Services (USCIS). The AITF conducted a review process entering final vetting stages. The selections will be announced internally in October 2023 and publicly in November 2023. The sponsored projects will be subject to AITF-RUG oversight.

- **Combating Online Child Exploitation and Abuse:** ICE Homeland Security Investigations (HSI) identified improvement opportunities with the Investigative Case Management system and potential solutions leveraging a large language model. This would provide operators with the capability to review a large volume of unstructured investigative reports and derive meaningful insights.

- **Ethical Hacking:** The AITF began planning for Hack DHS bug bounties, including exploring which will be used to spread awareness and identify vulnerabilities in systems. Hack DHS events will also explore "red teaming" of DHS AI systems in calendar year 2024. The team will work with CISA, the OCIO Chief Information Security Officer Directorate, Agencies and offices, and external partners to develop goals and identify potential assets.

- **AI Infrastructure and AI/ML Ops**: CBP, in coordination with the AITF, commenced establishing infrastructure requirements for developing, deploying, and managing machine learning models within DHS. Specifically, CBP, ICE, and USCIS have been developing AI and machine learning operational pipelines and best practices for deploying and operating AI models.

- **Audio Transcription and Translation:** On October 24, 2023, the ICE HSI Innovation Lab deployed a machine learning-based audio transcription and translation tool that supports 57 languages, runs completely within the ICE Cloud environment, and will be available for field users by December 2023. Improvements are planned to enhance support for complex dialects and to integrate the capability into several existing HSI Innovation Lab tools.

Next Milestone

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The Discovery and Analysis phase ended September 2023 and information gathered during this phase will be used to inform the DHS mission-focused AI strategy. This strategy revision targets completion by the first quarter FY24.

Other Efforts

In addition to these efforts by the AITF, PLCY has begun an effort to catalog and track responsibilities for DHS Components under the President's October 30, 2023 Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence. This process will ensure milestones and requirements outlined in the EO are tracked and reported to DHS Leadership. PLCY and the AITF Leadership will coordinate on future Leadership updates as appropriate.

OGC/Chief Counsel Coordination: Counsel for OGC-TPLD (Nicole Marson) and OGC-GLD (OCIO) (Jennifer Carlisle, Gabe Lohr) have reviewed this memo and have no comments. OGC continues to provide legal review and support as needed.

Component Coordination: This memorandum was coordinated with the following components:

PLCY: DAS Thomas McDermott, cleared 11/3/23.
PRIV: CPO Mason Clutter, cleared 11/2/23.
CRCL: Officer Shoba Sivaprasad Wadhis, cleared 11/1/23.
CISA: Executive Director Brandon Wales, cleared 11/1/23.
ICE: OD DCOS Melanie White, cleared 11/3/23.
CBP: DCOS Steve Schoor, cleared 11/3/23.
USCIS: COS Felicia Escobar-Carrillo, cleared 11/3/23.