DEPARTMENT

OF

ADMINISTRATION

STATEWIDE

POLICY



State of Arizona

P2000 - GENERATIVE ARTIFICIAL INTELLIGENCE (GEN AI)

DOCUMENT NUMBER:	P2000
EFFECTIVE DATE:	October 24, 2024
Version:	1.1

1. AUTHORITY

To effectuate the mission and purposes of the Arizona Department of Administration (the "Department"), the Department shall maintain a "coordinated statewide plan for information technology" implemented and maintained through policies, and "adopting statewide technical, coordination and security standards" as authorized by Arizona Revised Statute A.R.S. § 18-104 (A)(1)(a). The Department shall also "formulate policies, plans and programs to effectuate the government information technology purposes of the department" pursuant to A.R.S. § 18-104 (A)(13).

2. Purpose

The purpose of this Policy is to provide a consistent and thoughtful management approach to the use of generative artificial intelligence technologies in this State that will continue to foster an environment for innovation while complying with law, protecting data privacy, ensuring accuracy and efficiency in public service.

- **2.1.** Generative Artificial Intelligence (Gen AI) refers to a set of technologies that utilize machine learning techniques to generate new content in response to user inputs rather than making a prediction about a specific dataset. The content produced can be textual, visual, spatial, spoken or even musical. A Gen AI system is one that learns to generate more objects that look like the data it was trained on.
- 2.2. These tools have the potential to be extraordinarily useful to public servants in their work, but they also present risks in the forms of data security, privacy, ethics, and bias. Therefore, this Policy and "2000PR Use of Generative Artificial Intelligence

Page **1** of **10** Date: 10/24/2024

DEPARTMENT

OF

ADMINISTRATION

STATEWIDE

POLICY



State of Arizona

(Gen AI) Procedure" serve as a resource for employees of the State to encourage responsible use of these emerging technologies.

- **2.3.** Data is the "fuel" that powers the "engine" of Gen AI. In order to gain the most benefit from the capabilities, we must ensure that our data is of the highest quality, fit for purpose, and available to authorized personnel (see Statewide Data Governance Policies).
 - **2.4.** As employees of the State, we are responsible for safeguarding the sensitive data provided to the various Budget Units (BUs). We must act in the best interests of the public by preserving the public trust.
 - 2.5. Gen Al is a tool, which employees of the State may engage to further their work, but is not a substitute for our entrusted responsibilities. As public servants, we remain responsible for our judgment and responsible use of the tools provided to us. We remain responsible for the outcomes and uses of these tools. Therefore it is incumbent upon employees to be educated on these tools, show good judgment in when and how the tools are employed, and to be reasonably accountable for the outcomes of using the tools.
 - **2.6.** As we explore the responsible use of Gen AI, we embrace the following principles to guide our efforts. These shared values of empowerment, inclusion and respect, transparency and accountability, innovation and risk management, and collaboration will steer our exploration and decision-making when employing these rapidly evolving technologies.
 - **2.7.** This Policy is meant to empower our employees, build trust with the public, spark progress, and ensure Gen AI serves the public well.
 - **2.8.** Nothing in this Policy shall be construed to limit or bypass compliance requirements with privacy standards to include, but not limited to Statewide Policy P8410: System Privacy.

3. Scope

This Policy applies to all BUs, as defined in A.R.S. § 18-101, and IT integrations and/or data exchange with third parties that perform IT functions, activities or services for or on behalf of BUs. Applicability of this Policy to third parties is governed by contractual agreements entered into between BUs and the third party/parties. In addition, policies, standards and procedures for security technology are covered by Statewide Policy 8120: Information

Page **2** of **10** Date: 10/24/2024

DEPARTMENT

OF

ADMINISTRATION

STATEWIDE

POLICY



State of Arizona

<u>Security Program</u>. Policies, standards and procedures for data governance are covered by Policy Category <u>P4400</u>: <u>Data Governance</u>.

4. ROLES AND RESPONSIBILITIES

- **4.1.** State Chief Information Officer (CIO) or his/her designee shall:
 - **4.1.1.** Collaborate with the State Chief Information Security Officer to evaluate State Security and Privacy Policies to determine if any updates are required to align with this Policy.
 - **4.1.2.** Periodically review State Security and Privacy Policies to determine if any updates are required to align with this Policy.
- **4.2.** State Chief Data and Analytics Officer (CDAO) or his/her designee shall:
 - **4.2.1.** Shall ensure that the statewide policies covering data, data management, data governance, and data sharing support and/or harmonize with Information Technology and Cybersecurity statewide policies with regard to Gen AI.
- **4.3.** BU Chief Information Officer (CIO) or his/her designee shall:
 - **4.3.1.** Ensure that all Gen AI solutions deployed or used by the BU comply with applicable Information Technology, Data Governance, and Cybersecurity statewide policies and procedures.
 - **4.3.2.** Determine minimum training requirements for BU personnel to complete before engaging with Gen AI in the course of their business duties to include the risks of using Gen AI and potential risks to state data.
 - **4.3.3.** Define a clear scope of work and metrics to determine the impact of the use of Gen AI.
 - **4.3.4.** Ensure that solution architecture and workflow diagrams are created and maintained for each Gen AI solution that is deployed or used by the BU.

Page **3** of **10** Date: 10/24/2024

DEPARTMENT

OF

ADMINISTRATION

STATEWIDE

POLICY



State of Arizona

- **4.3.5.** Ensure that the IT environment and infrastructure (i.e. compute, storage, network, etc.) can support the deployment of Gen AI tools where needed.
- **4.3.6.** Ensure that all Gen AI solutions are properly represented and recorded in the statewide application inventory maintained by ASET.
- **4.3.7.** Periodically review Gen AI usage within the BU to ensure that it adheres to policy and reflects the strategies and priorities of the BU and the State.
- **4.3.8.** Periodically review the performance of Gen AI solutions in use to assess effectiveness, consistency with alignment to the values listed in this document, accuracy, bias, and possible unintended outcomes.
- **4.4.** Individual managers / supervisors of BU Users shall:
 - **4.4.1.** Monitor the Users' use of Gen AI solutions, including checking Users' overall work for accuracy (i.e. the degree to which the work product conforms to the correct value or work standards of the BU) and reporting cases of errant content, hallucination, or evidence of bias to their upline.
 - **4.4.2.** Coach Users on the effective and efficient use of Gen AI solutions and on the optimal uses of increased productivity from Gen AI solutions.
 - **4.4.3.** Identify emerging best practices from Users and work to share best practices across teams and BUs.

4.5. Individual BU Users shall:

- **4.5.1.** Read, review and understand statewide and BU specific IT and Cybersecurity policies, standards and procedures regarding the use of Gen AI prior to utilizing these tools.
- **4.5.2.** Adhere to statewide and BU specific IT and Cybersecurity policies, standards and procedures pertaining to the use of Gen AI in the execution of their job duties and/or while using State or BU resources (including any State equipment).
- **4.5.3.** Complete any training prescribed by their BU prior to engaging with any authorized Gen Al solution.

Page **4** of **10** Date: 10/24/2024

DEPARTMENT

OF

ADMINISTRATION

STATEWIDE

POLICY



State of Arizona

5. Policy

- **5.1. General:** Gen AI is a powerful tool that should be used to improve government services and operations. When making use of Gen AI tools and capabilities, state BUs and users should consider the following general principles:
 - **5.1.1. Empowerment**. Gen AI should be utilized to support our workforce to deliver enhanced services and products efficiently, safely, and equitably to the public. We rely on the judgment of our professionals to ensure we realize the benefits of these tools.
 - **5.1.2. Transparency and Accountability**: We acknowledge the limits of foresight. But transparency builds trust and enables collective learning. When Gen AI is used, we must disclose that responsibly and share our workflow (i.e. where in our business processes we are employing Gen AI) freely with other public servants and with the public. BUs must be transparent about how they are using Gen AI. This shall include attribution to which Gen AI tool is used (see 2000PR Use of Generative Artificial Intelligence (Gen AI) for resources).
 - 5.1.2.1. All copyrightable works owned by the state that are created with the involvement of Gen Al must include an accompanying annotation sufficient to meet the requirements of the <u>U.S. Copyright Office for Works Containing Material Generated by Artificial Intelligence (88 FR 16190)</u>. The annotation should include at least the Gen Al technology used and a description of how it was used to create the work. A sample annotation is: "Selection, coordination, and arrangement of [describe human authored content] created by the author and [describe Al content] generated by artificial intelligence."
 - 5.1.2.2. Where a commercial Gen AI model is used, detail the AI model, prompts, and methods employed. This documentation aids comprehension and safe usage by colleagues and stakeholders. Sample AI-generated content disclosures:

"This content was generated with the aid of ChatGPT and subsequently revised by the staff of Agency _____."

"This text was summarized for clarity using Google Gemini."

Page **5** of **10** Date: 10/24/2024

DEPARTMENT

OF

ADMINISTRATION

STATEWIDE

POLICY



State of Arizona

- 5.1.2.3. BUs are encouraged to consider whether more specific policy and guidelines regarding disclosure of Gen AI assisted work products will best serve the public's need for transparency.
- 5.1.2.4. BUs are accountable for the decisions that are made and materials created using Gen AI.
- **5.1.3. Fairness**: The use and development of AI should uplift communities, connecting them effectively with resources to thrive, especially those historically marginalized. As public stewards, we will use tools respectfully to reflect the values of building an Arizona for Everyone. Gen AI systems can reflect the cultural, economic, and social biases of the source materials used for training, and the algorithms used to parse and process that content can be a source of bias as well. BUs shall make best efforts to ensure that Gen AI is used in a fair and equitable manner.
- 5.1.4. Security: We embrace responsible experimentation that maintains control and respects privacy and security while developing uses that drive efficiency, dialogue, and better service. BUs shall take steps to protect the security and privacy of State Data and the integrity of Gen AI models including, but not limited to, ad-hoc assessments. Arizona Department of Homeland Security's cybersecurity staff are available to provide technical support in securing AI resources which may include requiring proactive risk assessment. Requests for assistance can be submitted to email@azdohs.gov OR request assistance or support via the ServiceNow Customer portal. Click on ADOA-ASET Service Desk, then select "I Need Help".
- **5.1.5. Privacy:** BUs must protect the privacy of individuals when using Gen AI. This means that any models shall not be used to collect or store personal information without the consent of the individual.
 - 5.1.5.1. BUs must comply with all records management, privacy and other applicable laws, rules, and policies to ensure the appropriate and reasonable protection of data and the protection of rights of persons that may be impacted by information furnished by AI.
 - 5.1.5.2. No confidential data, as defined in Statewide <u>P8110 Data Classification Policy</u>, shall be added to a publicly accessible AI service or training model, including

Page **6** of **10** Date: 10/24/2024

DEPARTMENT

OF

ADMINISTRATION

STATEWIDE

POLICY



State of Arizona

Al services embedded into other services (e.g., search engines with Gen Al functionality).

- 5.1.5.3. Material that is inappropriate for public release shall not be entered as input to Gen Al tools that have not been explicitly approved for the intended use case.
- 5.1.6. Data Readiness: We focus on ensuring that data is accurate, complete, and relevant to the task at hand. Data should be pre-processed, well-structured, and properly labeled to meet model requirements, with sufficient volume and diversity to ensure fairness and reliability. Additionally, considerations include monitoring for bias, maintaining version control, and aligning data with both pre-trained and fine-tuned model needs for optimal GenAl performance. BUs shall be responsible for monitoring, assessing and ensuring these elements of data readiness regardless of whether the data is State Data or is data acquired from a third-party.
- **5.1.7. Training:** BUs shall mandate a minimum level of AI training for users responsible for business processes which are incorporating Gen AI.
 - 5.1.7.1. ADOA will provide training on proper usage of Gen AI for users. BUs shall ensure that all users of tools consisting of or incorporating Gen AI complete this training before being granted access and annually thereafter.

5.1.8. Procurement:

- **5.1.8.1.** BUs shall notify in writing the State CIO and State CISO of the planned procurement of any new software solution that incorporates Gen AI.
- **5.1.8.2.** BUs shall notify in writing the State CIO and State CISO before Gen AI capabilities are deployed to any existing software solution.
- **5.1.8.3.** New BU contracts shall prohibit Vendors of AI solutions (e.g. 3rd-parties) from using State of Arizona materials or data in Gen AI queries or for building or training Gen AI programs unless explicitly approved in advance by the State CIO and State CISO in writing.
- **5.1.8.4.** Procuring BUs shall ensure vendors disclose the utilization of Gen AI when producing works owned by the State and integration of Gen AI in products

Page **7** of **10** Date: 10/24/2024

DEPARTMENT

OF

ADMINISTRATION

STATEWIDE

POLICY



State of Arizona

used by the State, including any available information about specific Gen Al models used and their respective training data sets.

- **5.1.8.5.** Procuring BUs shall perform due diligence to ensure proper licensure of model training data for all Gen AI services using non-state data.
- **5.1.9. Collaboration:** Before deployment of Gen AI into any state production environment, BUs shall communicate and collaborate directly with the offices of the State CIO and the State CISO and review the use case, data classification, risk profile and security controls in order to demonstrate the compliance of the proposed solution/system and for the purposes of obtaining written authorization to operate the proposed solution in production. BUs shall ensure that sufficient resources are deployed (i.e. compute, storage, network, etc.) in production to support the solutions effective utilization.
- **5.1.10. Legal**: There are unresolved legal issues surrounding Gen AI and the data inputs used to create Gen AI models. As Gen AI systems can be trained using copyrighted material and/or other intellectual property that has been sourced without regard for copyright or licensing terms, sources of inputs to models must be reviewed and usage risk evaluated by the BU as part of the engagement with any Vendor or technology provider. The Collaboration process with the State CIO and State CISO as described in 5.1.9 above will satisfy the review process for the purposes of this policy.

5.2. Requirements

- 5.2.1. All Gen AI software services, even if they are free, open source or part of a pilot or proof-of-concept project, must be reviewed by BUs to ensure the AI software meets the level of quality acceptable to the BU as well as all necessary security and privacy requirements, including the Acceptable Use Policy. This requirement applies to downloadable software, Software as a Service (SaaS), web-based services, browser plug-ins, operating systems, and smartphone apps. New AI software requests are subject to existing applicable Information Technology, Data Governance, Security and Privacy policies.
- **5.2.2.** Use of Gen AI technology that is incorporated into existing services and products, such as internet search engines, does not require permission to use, however this Policy's guidelines and other requirements must be followed.

Page **8** of **10** Date: 10/24/2024

DEPARTMENT

OF

ADMINISTRATION

STATEWIDE

POLICY



State of Arizona

- **5.2.3.** All outputs must be reviewed by knowledgeable human operators for accuracy, appropriateness, privacy, and security before being acted upon or disseminated. Gen All outputs should not be assumed to be truthful, credible or accurate.
- **5.2.4.** Gen Al outputs shall not be used to impersonate individuals or organizations without their prior written permission.
- **5.2.5.** All software code generated through the use of Gen AI shall not be used in production until fully reviewed and tested for proper functionality and security by the BU. Any such use shall be properly documented.

6. Definitions And Abbreviations

Refer to the PSP Glossary of Terms located on the ADOA-ASET website.

- **6.1.** Any terms not defined in this Policy are defined in statute or rule.
 - **6.1.1. Artificial Intelligence (AI):** The science and engineering of making machines capable of performing tasks that are typically associated with human intelligence, such as learning and problem-solving. When used in this Policy, AI includes without limitation AI systems, Classic AI, External AI, Gen AI and LLM AI.
 - **6.1.2. Al Systems:** Products and services that incorporate Al hardware and software components that support machine learning, expert systems, and robust data sets to be adaptable and autonomous in providing requested solutions.
 - **6.1.3. Al Supplier or Al Vendor:** Any entity that supplies Al services or components, such as research, development, training, implementation, deployment, maintenance, provision, or sale of Al systems.
 - **6.1.4. Classic (or Non-Generative) AI:** Any system that uses aspects of Artificial Intelligence to apply predefined rules to automate steps in an existing workflow or to predict an outcome based on a set of training data.
 - **6.1.5. External AI Systems:** An AI model or engine that depends on infrastructure or data resources outside the immediate and complete control of the State.
 - **6.1.6. Gen AI:** See 'Generative AI' below.
 - **6.1.7. Generative AI:** An AI system that learns the patterns and structures of input training data to generate new content.
 - **6.1.8. LLM or Large Language Model AI:** Also referred to as Foundation Model AI, this is a type of AI that uses deep learning techniques to recognize, generate, translate, and/or summarize vast quantities of data (usually written human language and textual data). This type of AI is adaptable for use on a wide range of tasks.

Page **9** of **10** Date: 10/24/2024

DEPARTMENT

OF

ADMINISTRATION

STATEWIDE POLICY



State of Arizona

6.1.9. Data readiness for Generative AI: Refers to the state of data being fully prepared, curated, and optimized for effective use in training and deploying generative models. It involves ensuring that data is accurate, relevant, complete, and properly structured to meet the specific requirements of the model.

7. References

- **7.1.** A.R.S. § 18-104
- **7.2.** A.R.S. § 18-101
- 8. LINKS

9. Version History

Date	Change	Revision	Signature	
3/15/2024	Initial Version	1.0	J.R. Sloan	
10/24/2024	Revision and updates based on early use, feedback and guidance.	1.1	J.R. Sloan	

Page **10** of **10** Date: 10/24/2024