State of California Generative Al Toolkit for Procurement, Use, and Training

Toolkit Requirements

Who is this toolkit for?

State teams seeking to procure and evaluate GenAl use cases. This includes people with varying roles including information security, procurement, legal, and program delivery.

Toolkit Purpose

- This toolkit should support and empower state entities to be able to self-assess risk levels, collaborate with control agencies on higher risk use cases, and document and share learnings throughout their GenAl experimentation.
- This toolkit focuses on user-centered, plain language guidelines that link out to detailed policy as needed. It should not be regarded as a policy document itself.
- This document will be updated on an ongoing basis based on both user feedback and evolving best practices in GenAI.

Toolkit Modules

Module	Topic
1	<u>Landing Page</u>
2	Where to Start
3	Identifying and Evaluating GenAl Use Cases
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5	GenAl Risk Assessment and Management
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Landing Page

This toolkit serves as a guide for California state entities in understanding and responsibly adopting generative AI (GenAI) technology in their work, as appropriate. As artificial intelligence capabilities rapidly advance, it's crucial that California state staff have the knowledge to obtain, evaluate, and use these tools in an ethical, unbiased way that serves the public good.

Governor Newsom's <u>Executive Order N-12-23</u> (<u>Executive Order</u>) emphasizes the need for responsible implementation of GenAl throughout state government. To achieve that purpose, this toolkit complements broader state guidelines on GenAl adoption by offering resources for State staff to identify, procure, and/or use potential GenAl use cases.

Inside you'll find:

- Where to Start: Explains your responsibilities in procurement and use of GenAl technology.
- <u>Identifying and Evaluating GenAl Use Cases</u>: Helps you identify potential ways to use GenAl, considering both the benefits and risks.
- <u>Training and Resources</u>: Helps you find relevant training and other resources to answer questions about GenAl.
- GenAl Risk Assessment & Management: Helps you assess the level of risk (low, moderate, or high) in GenAl projects.
- <u>Procurement Process for GenAl</u>: Helps you navigate procurement processes for GenAl technology.
- Roadmap & FAQ: Shares the current roadmap for this GenAl toolkit, answers questions, accepts feedback, and explains the update process for this toolkit.

The goal of this Toolkit is to equip state employees with the insights needed to deploy GenAl safely, fairly and effectively. This technology holds promise but also many risks if used without necessary guardrails and informed without proper engagement.

Moreover, given GenAl is a new technology, we expect that 2024 will be a year of piloting, testing, and learning as vendors create standalone GenAl products and begin to offer GenAl-enhanced software updates to preexisting products.

Where to Start

As a state entity, what am I responsible for and how do I fulfill those duties?

This section summarizes your responsibilities in the use of GenAl technology and includes important definitions you should know.

First, a few definitions...

You will need to know the terms below to make the most of this toolkit. For a more complete review of GenAI, including a detailed assessment of GenAI versus conventional artificial intelligence, see the State of California Benefits and Risks of Generative Artificial Intelligence Report (Nov. 2023). The following definitions will evolve over time. For a complete list of definitions, please see the Additional Definitions section.

- 1. Conventional AI Sometimes referred to as "machine learning" or "data science," conventional AI is data models and computer programming that is built for a few specific tasks, which are determined by the programmer. It can accomplish predefined tasks or analyze patterns. It does not produce net-new content and can only analyze the data it is given. Conventional AI is already widely used in products across government and society. Some examples include robotic process automation, fraud detection tools, image classification systems, recommendation engines, and interactive voice assistants.
- 2. Generative AI (GenAI) Pretrained AI models that can generate images, videos, audio, text, and derived synthetic content. GenAI does this by analyzing the structure and characteristics of the input data to generate new, synthetic content similar to the original. Decision Support, Machine Learning, Natural Language Processing/Translation Services, Computer Vision and Chatbot technologies or activities support or may be related to GenAI, but they are not GenAI on their own.
- 3. **Incidental GenAl Purchase** A state entity identifies the use of GenAl tools as part of an overall purchase for any type of procurement. A request to primarily purchase a good or service, where the State or vendor identifies a subcomponent of the purchase as using GenAl tool(s) to assist with the delivery of the solution, is considered an incidental purchase of GenAl.
- 4. **Intentional GenAl Purchase** A state entity identifies a GenAl product or solution to meet a business need for any type of procurement. A request to purchase a specific GenAl product or solution at the onset of a procurement is considered an intentional purchase of GenAl.

State entity responsibilities at a glance

Per the Executive Order, all state entities are required to consider GenAl pilots by July 2024. As state entities look to GenAl solutions to enhance and improve the programs and services state government provides to the people, state entities must assess the impact to the state workforce, engage the state workforce and receive feedback on the GenAl solution, and determine how GenAl can support state employees in their daily responsibilities and tasks.

In addition, all state entities must prepare for incidental GenAl purchases by:

- Assigning an executive to be your state entity's GenAl lead to continuously monitor and evaluate GenAl tools.
- Attending mandatory training(s).
- Reviewing annual employee training and policy to ensure staff understand and acknowledge the acceptable use of GenAl tools.

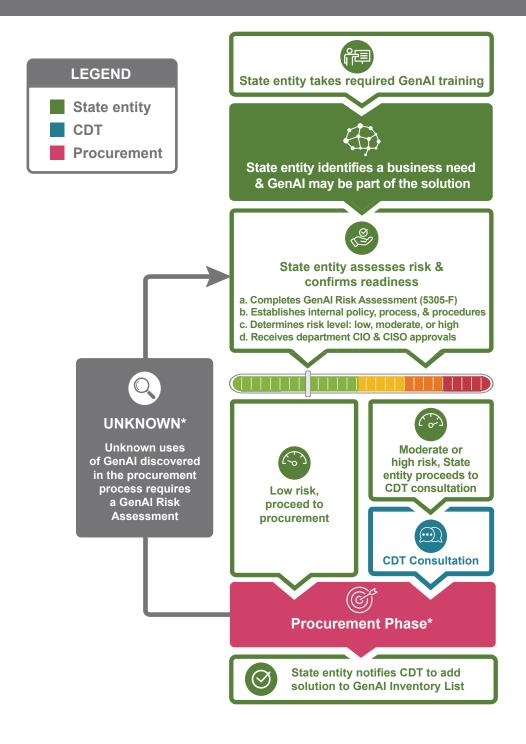
State entities seeking intentional GenAl purchases must also:

- Conduct a comprehensive analysis to identify a business need and thoroughly assess the problem, evaluate the implications of using GenAl to meet that need, and identify potential solutions through market research.
- Assess the risk of deploying each tool being considered.
- Confirm that necessary internal policies, processes, and protocols exist to properly manage, and monitor GenAl.
- Prepare data inputs and test models thoroughly before deploying to the public, gathering feedback and correcting outcomes to minimize bias and inaccurate information. Continue to evaluate each GenAl tool throughout its use within a department, always including a human in the loop for riskier solutions.
- Establish a GenAl-focused team to evaluate potential uses of GenAl and its implications for ongoing operations and program administration.

Community Engagement

GenAI has the potential to transform the customer experience that Californians have with your state entity's program. Because of this, it is a best practice for your state entity to continually engage with the communities you serve as you build out your program's service delivery. Surveys, user research, and focus groups may be useful ways to ask the Californians you serve how the GenAI updates to your program are useful to them—and how they think it could be improved.

Generative AI (GenAI) Readiness



For more detailed information, please see the <u>Procurement Process</u> section of this toolkit.

Identifying and Evaluating GenAl Use Cases

What do GenAl solutions look like, and how do I determine if a GenAl tool is a good fit for my department's problem?

This section shows common or likely use cases for GenAI in the State, for illustrative purposes. It also lists important guiding questions you should ask well before beginning the procurement process for a GenAI tool.

Introduction

GenAl represents a new category of artificial intelligence. While conventional Al can classify data or make predictions, GenAl can create entirely new content. The table in the next subsection summarizes some business needs already identified as potentially suited for GenAl.

As vendors and software companies push GenAl-enhanced features into production for software your department already owns, it will be important for you to understand common use cases of GenAl. By understanding common use cases, your department can successfully meet its requirement to continuously assess the software by placing it in the right context and asking the right questions.

Identifying use cases

Here are some use cases that may apply to your department's business needs:

Operational Need	GenAl Outcome	Common GenAl Use Cases
Content generation (text, image, video)	Generates completely novel content, instead of remixing and modifying existing content.	 Generate public awareness campaign materials like fliers, website content, posters, and videos. Generate visualizations of data.
Chatbots	Leverages conversational models trained on massive dialogue datasets. Can have coherent discussions and execute tasks via conversation naturally.	 Build a virtual assistant for common constituent questions. Voice-enabled digital assistance. Create a chatbot to guide users through services in their preferred language. Increase first-call resolution for state customer service centers. Reduce call wait and handle time at state customer service centers.

		Create greater language access equity for program beneficiaries.
Data analysis	Finds insights and relationships in data through learned knowledge about the world, without hand-coded rules or labeled training data.	 Analyze healthcare claims or tax filing data to detect fraud. Analyze network activity logs, identify cybersecurity anomalies and threats, and propose remediation actions. Ticket triaging. Root cause identification. Resolution recommendation from historical tickets.
Explanations and tutoring	Generates natural language explanations and tutoring through dialogue without humanauthored content.	 Explain program eligibility to potential enrollees. Provide interactive tax assistance.
Personalized content	Leverages user data, information and/or models to adaptively generate personalized content without explicit rules or large amounts of user data.	 Auto-populate tax information and filing instructions based on a person's needs. Help auto-populate public program applications based on a person's situation and household composition.
Search and recommendation	Uses contextual cues to improve search relevance and provide useful recommendations.	 Searching or matching state code regulations concerning specific topics. Recommend government services based on eligibility. Search regulations nationwide.
Software code generation	Generates code by learning underlying structure and patterns of code, without the need for human written examples. Can expand short descriptions into full programs.	 Translate policy specifications, such as Web Content Accessibility Guidelines (WCAG) and Americans with Disability Act (ADA) requirements, into software code. Generate data transformation scripts from instructions. Accelerate adoption of human-centered design in state webbased forms and pages.

		 Reduce administrative costs and burden to developing and maintaining best-in-class state government websites.
Summarization	Does not require human- written summaries as training data. Can learn underlying patterns of language to generate summaries.	 Summarize public comments to identify key themes. Summarize public research to inform policymakers. Summarize statutory or administrative codes.
Synthetic data generation	Allows generation of new diverse, anonymized data from existing datasets for analysis and experimentation.	 Generate synthetic patient data for training healthcare AI. Generate simulated tax records for training tax auditing AI.

Source: <u>State of California Benefits and Risks of Generative Artificial Intelligence Report,</u> November 2023.

Evaluating use cases

When evaluating potential GenAl use cases, consider the following questions in order to explore the benefits and risks of deploying this technology:

- What are potential inequities in problem formulation?
- What are the data inputs?
- How and when will the solution be implemented and integrated into existing and future processes and delivery of services?
- Who will be the GenAl team responsible within the program area to monitor, validate, and evaluate the GenAl tool?
- How does using the GenAl tool build trust with the end users like State staff or Californians?
- Is the GenAl tool accessible and culturally appropriate?

Before initiating a GenAl project, it is also critical to consider the communities and users that may be impacted by the use case, whether they are the primary service population or groups that may be unexpectedly affected. A few criteria to begin thinking about the potential impacts of GenAl on communities include severity, scale, duration, and types of potential impacts of GenAl tools across a range of community group sizes.

Severity of risk

The degree and type of the impact should be considered in determining an overall assessment of risk level for a GenAl use case.

Scale of risk

The scale and duration of the impact should be a consideration in determining the risk level for a GenAl use case. This should include an impact analysis of various affected groups – including, but not limited to, individuals, workers, communities, businesses, and local governments.

Important considerations in understanding GenAl risks include:

- The risk of biased outputs from GenAl tools that amplify existing societal biases, particularly in use cases that may impact the delivery of public services.
- The risk of hallucinated outputs from GenAl tools that can impact the validity, accuracy, or performance stability of State services.
- The risk of harmful or inappropriate materials generated by GenAl, such as deepfakes that could spread misinformation.
- The risk of GenAl tools lacking a human-in-the-loop reviewer who can validate the outputs of the system.
- The risk of automation bias (an over-reliance on automated GenAl systems to make decisions), given the ability of GenAl tools to produce answers that "sound right" despite having no factual accuracy.
- The risk of security vulnerabilities in GenAl tools exposed through new, natural language interfaces or source datasets.
- The risk of black box GenAl applications that are unable to explain the rationale behind its recommendations for services that require this capability.
- The risk of privacy re-identification issues for datasets including vulnerable communities that depend on anonymity for safe data analysis.

Source: <u>State of California Benefits and Risks of Generative Artificial Intelligence Report,</u> November 2023.

The Government Operations Agency (GovOps), Department of Technology (CDT), and Office of Data and Innovation (ODI) are working to develop guidelines for evaluating the impact of GenAI use cases on historically vulnerable and marginalized communities. These guidelines will be published by July 31, 2024, and will be added to this toolkit once available.

Training and Resources

I will need training for all of this. How do I find the right training for questions that I have?

This section shows the recommended phases of GenAI training based on staff level. It also includes an overview of the training series CalHR is developing to meet the state workforce's various needs in regard to GenAI.

GenAl is a new and rapidly evolving technology, so training is important to responsibly and safely understand and use GenAl tools. CalHR is creating a comprehensive training series to prepare state staff of all levels to support secure and responsible use of GenAl that achieves equitable outcomes and mitigates potential output inaccuracies and biases. The trainings are intended to support safe, secure, and responsible business implementation, ethical use of Al technology, and state staff learning and development.

State entities should consider a phased approach to workforce GenAl training. First, your department's Executive leadership, legal, labor, and privacy specialists should be trained. Next, the business owners and the technical experts who oversee programs that are likely to consider GenAl tools should be trained. Then, the general workforce of your department should receive training on GenAl.

The table below summarizes GenAl training modules according to the needs of different audiences and skillsets. As training modules and resources become available, this table will link to those resources.

General Education	Foundational introduction to AI, types of AI, potential business applications, potential risks, and comparing conventional AI versus GenAI. Key Questions Answered Through this Training: What is AI? What are the different types of AI? What is the difference between Conventional AI and GenAI? What are common business uses of AI? What are the risks of AI?
Risk Intelligent GenAl Competencies	Module 1: Introduction to GenAI, basic functional concepts, potential use cases, and risk mitigation. Key Questions Answered Through this Training: In simplified terms, how does GenAI work? What are the potential use cases of GenAI? What risks are associated with GenAI, and how can they be mitigated?

	 What is the State's role in ensuring safe, secure, and responsible business implementation of GenAl?
	Module 2: Legal and privacy considerations of GenAl, data ownership, product ownership, and managing privacy risks.
	 Key Questions Answered Through this Training: How do state government information privacy policies apply to GenAl? How do state government data and product ownership policies apply to GenAl? What potential privacy risks exist with GenAl compared to conventional Al? What are the best practices to mitigate privacy risks with GenAl? How do state entities utilize the state's risk assessment process for GenAl use cases?
	Module 1: GenAl infrastructure, model management, model training, and output monitoring.
Technical Training	 Key Questions Answered Through this Training: How is data prepared for model training? What are GenAl model training methods? What are best practices of output monitoring? What are best practices for preventing and troubleshooting model collapse?
	Module 2: Security considerations of GenAI, information security, and cybersecurity threat protection.
	 Key Questions Answered Through this Training: What are the information security considerations of GenAl? What are best practices of cybersecurity protection against GenAl threats? What are best practices for controlling information access by GenAl models?

Procurement GenAl Training

Procurement training will be accessible to state purchasing officials for identifying GenAl purchases, understanding the different levels of risks associated, and navigating GenAl purchase process flows. This training will be part of the <u>California Procurement and Contracting Academy (CalPCA)</u>.

GenAl Risk Assessment and Management

How do I assess GenAI use cases for risk? What are the most important considerations to keep in mind when researching GenAI tools? How should I begin planning to mitigate the risk of GenAI tools?

This section helps you understand and interpret the risk level criteria defined in the GenAl Risk Assessment in a consistent way. It clarifies best practices and offers plain language suggestions on how to identify GenAl risks. A guided workflow demonstrates how to self-assess GenAl risk and engage with CDT in consultations on moderate/high risk use cases. It explains the principles that will guide GenAl risk assessment in California.

Introduction

Your department has identified a GenAl use case and determined that a GenAl tool could potentially benefit your program. Next, you must account for and mitigate risks by conducting a risk assessment that documents potential risks to consider before procuring your GenAl use case.

The Department of Technology (CDT) has developed the GenAl Risk Assessment (SIMM 5305-F) to guide state entities through a thorough risk assessment of a proposed GenAl tool before it moves toward procurement. This assessment was developed based on the <u>National Institute of Standards and Technology's Al Risk Management Framework</u>, the State Administrative Manual (SAM), and the State Information Management Manual (SIMM).

The GenAl Risk Assessment classifies a GenAl tool as "Low," "Moderate," or "High" risk based on the GenAl solution, the data underlying it, and how the department wants to use the tool. A high-level risk assessment workflow is shown below. As you can see, GenAl tools assessed as low risk can be largely managed in-house at each department. GenAl tools assessed as moderate or high risk require additional CDT support and oversight so that your department can safely and responsibly deploy the tool.

Department CIOs must conduct a risk assessment for all GenAl purchases, whether intentional or incidental.

Effective July 1, 2024, the GenAl Risk Assessment (SIMM 5305-F) will be a requirement for state entities to complete when pursuing GenAl projects.

Before July 1, 2024, there is a soft launch period to test the GenAl risk assessment process that includes the state entity's GenAl lead, CIO/AIO consultation with CDT to help determine a state entity's GenAl readiness before a GenAl purchase can be made.

GenAl Risk Assessment (SIMM 5305-F) workflow at a glance Effective July 1, 2024

- 1. Identify the problem statement of the use case (for example, see Identifying GenAI use cases) and why your department feels GenAI is helpful over other solutions (such as conventional AI or traditional data analytics).
- 2. Use the GenAl Risk Assessment to document risk considerations for the GenAl use case.
 - a. **Not sure of a GenAl tool's risk level?** State entities can use the decision flow chart to help with self-assessment of the risk level. This decision flow chart will ask a series of questions regarding the data type, the intended use of the GenAl, and magnitude of risks to evaluate an initial risk level. State entities are responsible for conducting a thorough risk assessment to explain the risk classification level they assign.
- 3. **If your department classifies the GenAl use case as "Low" risk**, your department will work with your CIO/AIO/Legal teams to identify any potential risks or problems with GenAl so informed decisions can be made.

4. If your department classifies the GenAl use case as "Moderate" or "High" risk:

- a. Using California's GenAl Risk Management Principles as a guide, your department must develop a risk mitigation strategy to show how the moderate or high risk of the GenAl tool will be adequately mitigated, monitored, and managed prior to procurement and on an ongoing basis.
- b. Then, your department must consult with CDT. Your department's CIO, AIO, or your designee will submit a consultation request to CDT along with the risk assessment and mitigation plan, as well as any other documents CDT requests. Your department will work with CDT to codesign a risk assessment and management plan for your department to be able to safely procure and use this GenAl tool.
- c. The consultation process will consist of a conversation to address the business needs and risks of using GenAl. Solicitations that contain a "Moderate" or "High" risk GenAl solution may not be released, or a contract executed, without a CDT consultation.
- d. Complete Part 2 of the GenAl Risk Assessment to fill out privacy, security, transparency, and DEIA considerations for this GenAl use case.
- e. Assign a GenAl subject matter expert from your department to help facilitate the CDT consultation and contract management. A GenAl subject matter expert is someone who has completed the required

technical and business training offered through CalHR to appropriately identify and evaluate the benefits and risks of GenAl technology.

California GenAl Risk Management Principles

California has identified key focus areas for identifying and managing risks of using GenAl. You should use these principles as a foundation in developing a risk mitigation strategy to address potential safety, privacy, and security concerns before deploying GenAl. California's risk management principles emphasizes key elements of the NIST Artificial Intelligence Risk Management Framework and are intended to ensure NIST standards are considered, referenced, and applied appropriately for California's needs.

Risk Management is a key consideration for GenAl and is essential for you to successfully plan, implement, and operate GenAl technologies. The GenAl risk management principles are intended to ensure you responsibly deliver critical services to all Californians in a safe, secure, and equitable manner.

Key Risk Management Principles

- Statewide Administrative Management Statewide Administrative Management refers to policies contained in the Statewide Administrative Manual, Statewide Information Management Manual, and the CalHR Human Resources Manual. This principle emphasizes the need for administrative and operational policies, standards, and guidelines to ensure the use of GenAl is fit for purpose, and ensures the legal, ethical, equitable, safe, and secure use of GenAl technologies.
- State Entity Governance This principle highlights the importance of the departmental policies, processes, risk documentation, and procedures necessary to ensure acceptable use and effective operational oversight of GenAl technologies as it relates to your business and mission objectives.
- Quality, Safety, and Security Controls The principle focuses on the need for adequate quality, safety, and security controls required for you to train, validate, assess, secure, and take corrective actions to ensure that GenAl models and vendors perform as expected.
- 4. Public-Private Partnerships and Community Engagement This principle emphasizes the need for your department to create, grow, and sustain meaningful partnerships with those who build GenAl solutions as well as those Californians who may be most directly affected by them.

Procurement Process for GenAl

How do I procure GenAl tools?

There are some ways in which a GenAl procurement differs from a standard procurement. This section explains those differences, including the guided workflow that state entities must take to procure GenAl tools. It includes materials to help shape the GenAl solicitation, including standardized disclosure language, bidder documentation requirements, and special provisions for GenAl solicitations. It also specifies department responsibilities for moderate/high risk GenAl use cases, and CDT's role.

Introduction

As with any procurement, GenAl procurement starts with pre-procurement activities, moves through an acquisition phase that culminates in awarding a contract, and then enters a post-award phase of reporting and contract management.

The process differs for new GenAl contracts and existing contracts with GenAl tools included as part of the contract work.

There are some ways in which a GenAl procurement differs from a standard procurement. The rest of this section includes detailed information about the additional requirements for a GenAl procurement. A high-level overview is below:

- **CDT Consultation:** Once GenAl is identified in the procurement process, the state entity's CIO/AIO may be required to consult with CDT.
 - Effective April 30, 2024: All purchases directly for GenAl or that include any incidental GenAl, require a consultation with CDT before proceeding with a solicitation or completing the contracting process for those instances in which incidental GenAl is identified as part of a solicitation response or contract amendment.
 - Effective July 1, 2024: Based on the state entity's risk assessment covered in the GenAl Risk Assessment and Management module, if the procurement is for moderate or high risk GenAl use cases, consultation with CDT is required.
- Mandatory disclosure language: Special solicitation language required for bids/ offers to include for GenAl disclosure and special provisions.
 - Effective April 30, 2024: All solicitations must include GenAl disclosure language and a requirement for vendors/offerors to disclose the use of GenAl in any responses to state entities. GenAl technology solutions must also incorporate GenAl Special Provisions as identified through CIO/AIO consultation with CDT regardless of acquisition type, dollar value, or method.

- Effective July 1, 2024: Special solicitation language is required for all bids/offers to include for GenAl disclosure and special provisions for moderate/high risk cases, if required by CDT.
- Evaluation and selection of vendors: Bidder/Offeror must submit completed GenAl Disclosure & Factsheet for all GenAl procurement cases to be eligible for selection (effective April 30, 2024).
- Contract Management of GenAl technology: All GenAl contracts require a
 contract manager to continuously oversee and evaluate the GenAl technology
 through contract administration for risk considerations. Moderate/high risk GenAl
 cases that received a CDT consultation may require additional evaluation and
 monitoring per CDT requirements.
- Reporting: Each state entity will be required to report all GenAl purchases into FI \$Cal as specified in the State Contracting Manual. See Reporting section below for more details (effective April 30, 2024).

The State Contracting Manual (SCM) is the primary source of guidance for state contracting and procurement. Existing contracting laws, policy, and procedures still apply to purchases that include GenAl. When a state department is considering purchasing GenAl (both intentional and incidental purchases), additional steps must be included in the procurement process to properly assess and mitigate the risk associated with the GenAl tool or service. This applies to IT, non-IT (e.g., consultants using GenAl), or telecom purchases.

It is important to understand that GenAl may be introduced at different phases of the acquisition process. Below are scenarios indicating when GenAl may be identified:

1. Pre-Solicitation

Intentional GenAl purchase

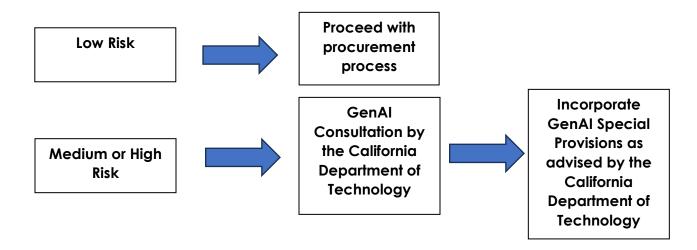
2. Post-Solicitation

Incidental GenAl purchase as a result of offer/bidder disclosure

3. Contract Amendments

GenAl capabilities on existing contracts

Regardless of where GenAl is identified in the procurement process, risk will need to be assessed. Beginning July 1, 2024, the level of risk associated with the purchase will determine a state entity's path forward:

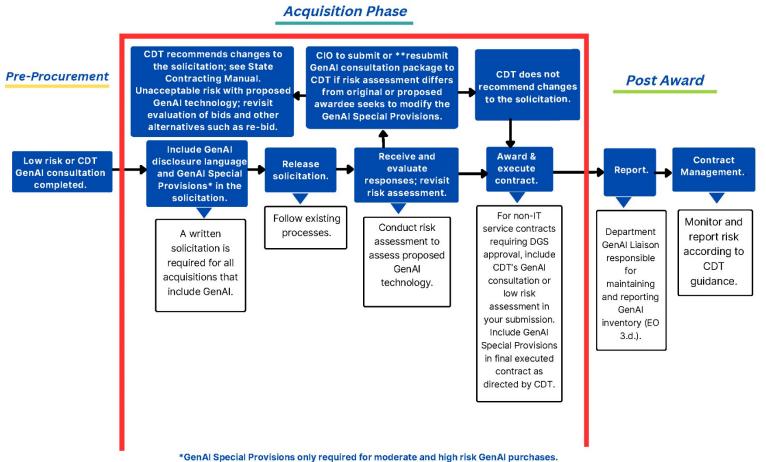


Prior to July 1, 2024, as part of the soft launch period, all GenAl purchases need to be consulted with CDT.

See the Procurement Process Flows section for a more detailed overview.

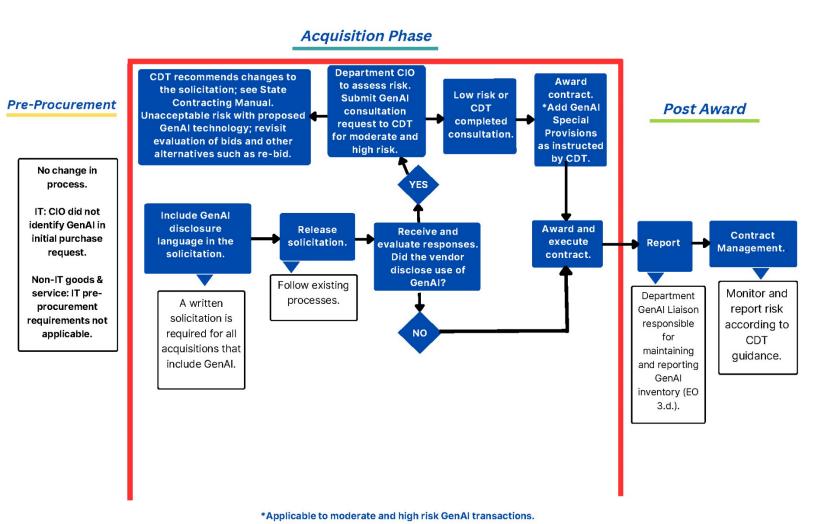
Procurement Process Flows (Effective July 1, 2024)

Procurement process flow for new contracts where a state department is intentionally purchasing GenAl at outset of the procurement process:



^{**}Resubmission to CDT for changes to the terms, scope, or complexity of GenAl technology functions or services that were not evaluated or considered in the initial consultation.

Procurement process flow for new contracts where GenAl technology functions or services are identified by the GenAl Disclosure & Factsheet:



Procurement process flow for existing contracts:

This process will be addressed in an upcoming revision to this document. The process will address amendments, a GenAl disclosure notification, GenAl consultation with CDT, and an exception to the Non-Competitive Bid (NCB) Justification process for amending existing contracts where GenAl tools are being used by the awarded vendor to complete the work to include GenAl Special Provisions.

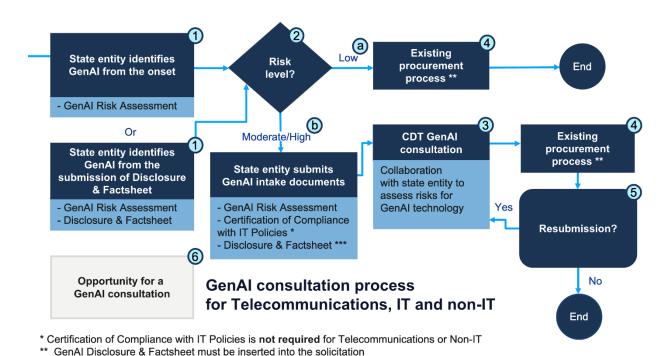
Required GenAl Consultation by California Department of Technology

Prior to July 1, 2024, as part of the soft launch period, **ALL** GenAl purchases must be consulted with CDT. State entities must consult with CDT prior to awarding a solicitation that includes GenAl. No solicitation shall be released, nor shall any contract be executed for the procurement of any GenAl technology functions or services until CDT has been consulted and provided the state entity with guidance to move forward with the procurement.

Effective July 1, 2024

If your state entity has released a GenAl solicitation for a "Low" risk solution, and then GenAl use is identified on the <u>GenAl Disclosure & Factsheet</u> of a top-scoring bidder, your state department must conduct a GenAl Risk Assessment of the disclosed GenAl to ensure it remains a "Low" risk solution. If the disclosed GenAl is assessed as "Low" risk, the solicitation can continue as planned.

If the disclosed GenAI is assessed as "Moderate" or "High" risk, your CIO, AIO, or designee must immediately contact CDT to request a consultation. See Step 4 of the GenAI Risk Assessment at a glance for more detail.



The consultation process is illustrated in more-depth within the diagram and a detailed workflow below.

*** GenAl Disclosure & Factsheet included in GenAl intake documents, if identified by vendor

- CIO, AIO, or designee identifies from the onset (includes but not limited to box 6), that a procurement is, or contains, a GenAI technology function or service, and completes the GenAI Risk Assessment (SIMM 5305-F) or State entity identifies GenAI technology function or service from the submission of the GenAI <u>Disclosure & Factsheet</u> during the procurement process.
 - a. Note: For GenAl acquisitions designated as "Moderate" or "High" risk, both the CIO and AlO are required to sign the GenAl Risk Assessment (SIMM 5305-F).
- 2. The state entity determines the risk assessment level of the GenAl technology function or service to be "Low", "Moderate", or "High" risk.
 - a. The state entity determines the GenAl technology function or service is a "Low" risk based on the GenAl Risk Assessment (SIMM 5305-F).
 - i. The state entity proceeds with the existing, standard procurement process and no CDT GenAl consultation is required.
 - b. The state entity determines the GenAl technology function or service is a "Moderate" or "High" risk based on the GenAl Risk Assessment (SIMM 5305-F).
 - i. The state entity submits a request to CDT and includes the GenAl Consultation intake documents.
 - 1. CIO, AIO, or designee:
 - a. Completes and signs GenAl Risk Assessment.
 - b. If an IT Procurement, completes and signs
 Certification of Compliance with IT Policies Template (SIMM 71-B).
 - c. Provides copy of the completed <u>GenAl Disclosure & Factsheet</u> (if applicable).
 - d. Provides any additional information to CDT to help determine the risk level for use cases and/or technology.
- 3. CDT GenAl Consultation for "Moderate" and "High" risk procurements.
 - a. CDT will provide consultative services to assist state entities with GenAl solutions to meet their program/business needs.
- 4. CDT consultation is concluded, and the state entity can proceed with the existing procurement process.
- 5. Resubmission After CDT's initial consultation, if at any time in the procurement process there are any changes to the terms, scope, or complexity of GenAl technology functions or services that were not evaluated or considered in the initial consultation, the state entity must resubmit the GenAl intake documents to CDT for further evaluation.
- 6. Avenues for a GenAl Consultation include but are not limited to:
 - a. Legislative Mandate: Instances for which a legislative mandate requires a solution that includes a GenAl technology function or service.
 - b. Market Research: A state entity is planning, researching, or performing analysis of a solution identifies a GenAl technology function or service.
 - c. Bid Response

- i. A State entity includes the required vendor disclosure, and a vendor identifies GenAl in their response to the solicitation, or as part of their proposal.
- d. Project Approval Lifecycle (PAL; SIMM 19) A state entity enters into PAL and at any stage identifies a GenAl technology function or service.
- e. Budget Change Proposal (BCP): A BCP is submitted to the Department of Finance for a solution that contains a GenAl technology function or service.
- f. Pilot or Proof of Concept a state entity exploring potential use cases.
- g. Intentional or incidental GenAl purchases related to IT, Non-IT or telecom purchases designated "Moderate" or "High" risk.

CDT's GenAl consultation may result in recommended conditions or require resubmission of the GenAl intake documents based on CDT's findings. CDT's consultation timelines depend on the complexity of, and information provided in the GenAl intake documents.

Note: The completed <u>GenAl Disclosure & Factsheet</u> and Risk Assessment Form (SIMM 5305-F) are confidential and exempt from disclosure pursuant to Government Code sections 7929.210 and 8592.45.

GenAl Contract Disclosure and Special Provisions

Effective April 30, 2024

Solicitations and contracts must include required language to identify GenAl through disclosure by the bidder/offeror as well as special provisions, if required by CDT, to protect the State, ensure that services provided to citizens of California are free of discrimination, are equitable, and accurate.

GenAl Disclosure

All solicitations, regardless of acquisition type or acquisition method, must contain the following GenAl disclosure notification clause:

The State of California seeks to realize the potential benefits of GenAI, through the development and deployment of GenAI tools, while balancing the risks of these new technologies.

Bidders/Offerors must notify the State in writing if their solution or service includes, or makes available, any GenAl technology, including GenAl from third parties or subcontractors.

The State has developed a <u>GenAl Disclosure & Factsheet</u> to be completed by the Bidder/Offeror.

Failure to disclose GenAl to the State and submit the GenAl Disclosure & Factsheet will result in disqualification of the Bidder/Offeror and may void any resulting contract. The State reserves its right to seek any and all relief it may be entitled to as a result of such non-disclosure.

Upon receipt of a Bidder/Offeror GenAl Disclosure & Factsheet, the state reserves the right to incorporate GenAl Special Provisions into the final contract or reject bids/offers that present an unacceptable level of risk to the state.

GenAl Special Provisions

When a CDT GenAI consultation indicates the need for special provisions related to the GenAI technology function or service, CDT will require and provide special provision language. No changes are permitted to the GenAI Special Provisions or to any other state standard terms and conditions without the prior approval of CDT/DGS.

No solicitation shall be released, nor shall any contract be executed for the procurement of "Moderate" or "High" risk GenAl technology functions or services until CDT has reviewed and approved the use of GenAl Special Provisions for the solicitation and contract.

These GenAl Special Provisions will be piloted and tested via 2024 GenAl procurements, as well as through a robust stakeholder engagement process. This piloting and stakeholder engagement will result in new GenAl General Provisions to apply to GenAl contracts beginning in January 2025, per the Governor's Executive Order N-12-23.

Evaluation and Selection

When evaluating responses to solicitations, regardless of acquisition type, dollar value, or method, the evaluation must include a mandatory administrative requirement for bidders/offerors to submit the required GenAl Disclosure & Factsheet, if applicable.

If the GenAl Disclosure & Factsheet is not submitted by the bidder/offeror, the bid/offer may be deemed nonresponsive.

Effective April 30, 2024

For all procurements, if GenAl is disclosed by the bidder/offeror, the procurement official must engage the state entity's CIO/AIO to consult with CDT.

Effective July 1, 2024

During evaluations and prior to selection, the department must use the details provided in the GenAl Disclosure & Factsheet to conduct a risk assessment. If the state department determines that the risk level is "Moderate" or "High," CDT's consultation is required prior to contract award.

Contract Monitoring and Evaluation of GenAl Technology

Contracts for the purchase of, or that include, GenAl may include unique, contract-specific requirements to ensure the State is adequately protected.

Contract Managers shall continuously monitor, assess, and validate GenAl contract deliverables for equitable outcomes, output inaccuracies, fabricated content, hallucinations, biases, and the need for human action for all decision-making processes, to ensure applicable state laws and policies are followed. State entities shall assign a GenAl subject matter expert to assist contract managers with assessing and validating contract deliverables.

Any contract that received a GenAl CDT consultation, and requires an amendment, must be re-evaluated. Any addition or modifications of GenAl technology by a vendor after contract award must be reported to the state entity CIO to complete a risk assessment prior to execution.

As a reminder it is a best practice for your state entity to continually engage with the communities you serve as you build out your program's service delivery post-procurement. Surveys, user research, and focus groups may be useful ways to ask the Californians you serve how the GenAl updates to your program are useful to them – and how they think it could be improved.

Reporting

FI\$Cal

Effective April 30, 2024

Each state entity will be responsible for identifying GenAl contracts in FI\$Cal. For all transactions where GenAl is intentionally or incidentally purchased the item description must start with "GenAl" before any other description is included in FI\$Cal using the "description" field.



GenAl Inventory

All state entities are required to conduct and submit an inventory of all uses of GenAl – intentional and incidental – to the California Department of Technology. Direction will be provided at a later date.

Toolkit Roadmap and FAQ

What other resources or guidance can you give me? What if I have more questions?

This toolkit is intended to be a living resource that evolves to meet the needs of state staff navigating the complex landscape of GenAl.

In the coming months, we plan to expand the toolkit with new toolkit modules, best practices, FAQs, and training courses based on user feedback and new developments in GenAl tools. Some priority areas for future content include:

- Guidance for evaluating GenAl impacts on historically vulnerable and marginalized communities.
- Training modules for procuring and using GenAl products for State use.
- Guidance to aid state entities in determining whether to deploy a GenAl tool.
- Best practices for using GenAl tools for public sector use cases.

Additional Definitions and Resources

Definitions

The following additional definitions are from California's Definitions for Artificial Intelligence (AI) and GenAI (SAM 4819.2). Definitions follow the below order of adoption:

- 1. National Institute of Standards and Technology (NIST)
- 2. CA Government Code
- 3. White House EO Al
- 4. GovOps/CDT AI/GenAI publications
- 5. Other technology leader sources

Algorithm - A clearly specified mathematical process for computation; a set of rules that, if followed, will give a prescribed result.

Artificial Intelligence (AI) - A machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. Artificial intelligence 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.

Automated Decision System - A computational process derived from machine learning, statistical modeling, data analytics, or artificial intelligence that issues simplified output, including a score, classification, or recommendation, that is used to assist or replace human discretionary decision making and materially impacts natural persons. An "automated decision system" does not include a spam email filter, firewall, antivirus software, identity and access management tools, calculator, database, dataset, or other compilation of data.

Chatbot - Computer programs that simulate and process human conversation, either written or spoken, to allow humans to interact with digital devices as if they were communicating with a real person.

Consequential Decisions - A decision or judgment that has a legal, material, or similarly significant effect on an individual's life relating to the impact of, access to, or the cost, terms, or availability of, any of the following:

- (1) Employment, workers management, or self-employment.
- (2) Education and vocational training.
- (3) Housing or lodging.
- (4) Essential utilities.

- (5) Family planning and child protective services.
- (6) Health care or health insurance.
- (7) Financial services.
- (8) The criminal justice system.
- (9) Legal services.
- (10) Voting.
- (11) Access to benefits or services or assignment of penalties.

Generative AI (GenAI) -- Pretrained AI models that can generate images, videos, audio, text, and derived synthetic content. GenAI does this by analyzing the structure and characteristics of the input data to generate new, synthetic content similar to the original. Decision Support, Machine Learning, Natural Language Processing/Translation Services, Computer Vision and Chatbot technologies or activities support or may be related to GenAI, but they are not GenAI on their own.

Large Language Model - A specialized type of artificial intelligence (AI) that has been trained on vast amounts of text to understand existing content and generate original content.

Machine Learning - A set of techniques that can be used to train Al algorithms to improve performance at a task based on data.

Natural Language Processing – Takes communications by humans and transforms the information into something more suitable for computer use and analysis.

Resources

State Contracting Manual

State Administrative Manual

State Information Management Manual

Benefits and Risks of Generative Artificial Intelligence Report (November 2023)

Executive Order N-12-23

White House's Blueprint for an Al Bill of Rights

National Institute for Standards & Technology's Al Risk Management Framework

5305-F Risk Assessment Work Flow - GenAl Toolkit

