

Date of Hearing: April 19, 2022

ASSEMBLY COMMITTEE ON PRIVACY AND CONSUMER PROTECTION

Jesse Gabriel, Chair

AB 1806 (Salas) – As Amended March 17, 2022

**SUBJECT:** Public contracts: information technology: Department of Technology: modular contracting

**SUMMARY:** This bill would require the California Department of Technology (CDT) to maximize, to the extent practicable, use of modular contracting, as defined, for large-scale information technology (IT) acquisitions. Specifically, **this bill would:**

- 1) Require, notwithstanding any other law, CDT to maximize, to the extent practicable, use of modular contracting, for large-scale IT acquisitions.
- 2) Provide that modular contracting, as defined, shall include successive, interoperable increments to be undertaken under one or more contracts to develop and implement the products and capabilities to deliver the larger IT acquisitions. Each increment, which can be contracted for and built sequentially or in parallel, shall have its own cost estimate, budget identifying full funding, schedule, performance expectations, and key deliverables for the product or capability it will develop and deliver. Each increment shall have its own development lifecycle, including planning, acquisition, development, and deployment, and shall be scoped in a way that it can be acquired independently so that the acquisition of any single increment does not commit the agency to acquiring any future increment.
- 3) Using modular contracting, require CDT to seek to achieve the following goals:
  - Simplify management of large-scale IT acquisition by breaking these undertakings into smaller increments.
  - Address complex IT objectives incrementally, thereby increasing the likelihood of achieving workable solutions for attaining those objectives.
  - Provide for delivery, implementation, and testing of workable systems or solutions in discrete increments, each of which comprises a system or solution that is not dependent on a subsequent increment in order to perform its principal functions.
  - Provide an opportunity for subsequent increments of the acquisition to take advantage of any evolution in technology or needs that occur during conduct of the earlier increments.
- 4) Provide that, to the maximum extent practicable, a contract for an increment of an IT acquisition using modular contracting shall be awarded within 180 days after the solicitation is issued. If the contract for that increment cannot be awarded within that period, the increment should be considered for cancellation.
- 5) Require that any increment of an IT acquisition shall be delivered within 18 months after the solicitation resulting in award of the contract was issued.

- 6) Require CDT to develop a process for overseeing large-scale information technology acquisitions using modular contracting, as defined, including a process for approving and overseeing the development of increments. The process shall set expectations for state agencies to plan and develop cost estimates, develop an overall strategy, report progress toward completion, and integrate increments into the overall acquisition.
- 7) Define “information technology acquisition” to mean a project for the development, modernization, enhancement, or maintenance of a single information technology asset, or group of information technology assets with related functionality, and the subsequent operation of those assets in a production environment.
- 8) Define “large-scale” to mean possessing a combination of elements that will function together to produce the capabilities required to realize an information technology acquisition if it is estimated to result in an eventual total expenditure exceeding \$2,500,000. The elements may include, among other things, hardware, equipment, software, or any combination thereof, but exclude construction or other improvements to real property.
- 9) Define “modular contracting” to mean a contractual approach that provides for incremental delivery, implementation, and testing of an information technology acquisition by dividing it into discrete increments.
- 10) Provide various Legislative findings and declarations including that large-scale information technology acquisitions are best realized using modular contracting when certain conditions occur, including:
  - An agency shares first, focuses on reusability, and leverages increments across the organization.
  - Integrated project teams are formed to identify the functional, technical, and other capabilities and characteristics required to make an acquisition deliverable, viable, and useful.
  - End users are involved early and throughout the development process and an acquisition’s requirements and design matures as understanding of the users’ needs mature.
  - Proper governance is provided to oversee increments’ progress and results.
  - Cost and schedules are managed at the increment levels, and cost and schedule targets are developed for each increment.
  - Performance measures and outcomes are defined early in the process and are monitored throughout the process through an established governance structure.

**EXISTING LAW:**

- 1) Establishes within the Government Operations Agency, CDT, under the supervision of the Director of Technology, also known as the State Chief Information Officer. (Gov. Code Sec. 11545(a).)

- 2) Requires the Director to, among other things, advise the Governor on the strategic management and direction of the State's IT resources and provide technology direction to agency and department chief information officers to ensure the integration of statewide technology initiatives. (Gov. Code Sec. 11545(b).)

**FISCAL EFFECT:** Unknown

**COMMENTS:**

- 1) **Purpose of this bill:** This bill seeks to improve the efficiency and success of large-scale State IT projects by requiring CDT to use modular contracting. This bill is author-sponsored.
- 2) **Author's statement:** According to the Author:

As noted in the California State Auditor's report assessing agencies that pose a high risk to the state, the California Department of Technology (CDT) has adopted Modular Contracting (MD) in the past for complex, larger scale projects but has not fully implemented the process or required it, even though it is more efficient, cost effective, and encourages participation from small businesses. This lack of implementation is part of the reason that CDT has been deemed high-risk and has prevented further growth in Information Technology (IT) solutions and innovation.

Currently, CDT's practices and approach to large complex projects does not facilitate timely technological innovation or completion. Requiring MD would aid in addressing and finding solutions to important complex issues in a timely matter.

- 3) **The California Department of Technology and information technology projects:** The Legislative and Executive branches have been in the process of restructuring the State's IT procurement and oversight responsibilities for more than a decade. In 2013, as part of Governor Brown's Government Reorganization Plan, the California Technology Agency became what is now the Department of Technology or CDT, which is situated within the Government Operations Agency. As part of Governor Brown's Reorganization Plan, CDT was given procurement authority over the State's IT projects.

In theory, by centralizing IT procurement and oversight under CDT, the State of California can more readily apply lessons learned from prior IT procurements, create better IT project bid requirements and contracts, and shorten the overall IT procurement process, which should ultimately improve the chances of success for the State's major IT projects (i.e., on time, at budget, and as promised). CDT is also responsible for completing regular project oversight reports detailing projects' progress against their objectives, scope, schedule, and cost. According to the State Auditor, "these reports identify and quantify any issues and risks affecting the project's objectives and include any recommendations that result from the reviews. If a project is in danger of not meeting its objectives, CDT may require the project team to develop a corrective action plan. If the project team does not effectively implement the action plan, CDT may take further action, including suspending or terminating the project. However, CDT staff stated that they work with project teams on an ongoing basis to provide guidance and information regarding risks and issues so the teams can address them, thereby avoiding more serious actions."

Last year, the State Auditor retained CDT as a high risk state agency for a number of reasons, including the fact that CDT, despite overseeing projects that are using adaptive approaches (i.e., “modular contracting”), has not yet completed development of its reporting and monitoring process for these kinds of projects.

The State Auditor reported:

State agencies have been using adaptive approaches for some large and complex IT projects. For example, CA-MMIS and FI\$Cal are using these adaptive approaches at least in part. However, in past reports we have identified areas of ongoing risks in both projects. In our December 2020 report on the CA-MMIS project, CDT indicated that it was developing a process for annual reporting and monitoring of projects that are using an adaptive approach, such as those employing modular development. CDT has begun developing proposed changes to its oversight process to create guidance for such projects, and it expected to begin a pilot program in July 2021. Additionally, CDT provided an example of one project that it expects will progress through the pilot program. However, CDT does not expect to complete the pilot until June 2023, and it does not expect to start fully implementing the proposed process until January 2024. CDT describes the pilot as an initial small-scale implementation of its new oversight process on projects of various sizes and levels of complexity and in different stages of implementation to verify whether its proposed process for overseeing adaptive projects is effective. According to CDT’s pilot scope description, one of the pilot’s objectives will be to incorporate feedback from external stakeholders when evaluating the usefulness of the proposed changes.

This bill would instead require, beginning January 1, 2023, CDT to maximize, to the extent practicable, use of modular-contracting for large-scale IT-acquisitions.

- 4) **Modular contracting:** Modular approaches involve dividing investments into smaller parts in order to reduce investment risk, deliver capabilities more rapidly, and permit easier adoption of newer and emerging technologies. As early as 2012, the federal government was producing guidance on the need for modular contracting.

Federal agencies have traditionally taken a multi-year “grand design” approach for developing, modernizing, and enhancing investments in IT. This approach is grounded in the common notion that responsible development necessitates a full detailing of requirements before work can start. Although a seemingly reasonable assumption, practical evidence and private sector experience has shown that large and complex IT implementations often encounter cost and schedule overruns, as the painstaking process of requirements gathering too frequently takes years to complete. Subsequently, agencies lose visibility into the performance of these multi-year IT development investments which affects their ability to implement corrective actions that reduce risk or mitigate financial exposure. The Government increases investment risk in these situations because: (1) the IT solutions that had once addressed agency requirements may no longer be pertinent or a priority; (2) substantial funds are allocated towards outdated solutions without any returns on the investments; or (3) agencies encounter budgetary constraints before substantive work is completed. (*Contracting Guide to Support Modular Development*; OMB, June 14, 2012, [Modular Approaches for Information Technology \(IT\) Development and Acquisition \(archives.gov\)](#).)

- 5) **Are there benefits to waiting for CDT to complete the pilot project?** As noted in Comment 3, above, CDT is in the midst of a pilot project evaluating adaptive approaches to IT procurement and contracting at the state level. The pilot is anticipated to be completed by June of 2023, with the final adaptive approach being implemented sometime after January 1, 2024. As a matter of public policy, this Committee should consider if the State of California would be better served by waiting for the results of that pilot project, or whether the research and evidence supporting a modular contracting approach is so clear that it is prudent to effectively override CDT's pilot and require modular contracting without considering the insights CDT is currently collecting.

Committee staff has reached out to CDT multiple times prior to this hearing to solicit feedback on the requirements of this bill and the status of their pilot project. At the time of this writing, CDT has not provided any such feedback.

- 6) **Drafting issues may warrant clarifying amendments:** As written, this bill presents a number of issues that may create confusion in its application. Without commenting on the policy of the bill or its provisions, the forthcoming suggested amendments will clarify its contents for future analysis:
- *Findings and declarations should be uncodified:* Findings and declarations of the Legislature are typically found in uncodified language of bills. These statements serve the important purpose of informing the members and the public of a need for a bill and are included at the beginning of legislative proposals. Once a bill is enacted into law, its substantive provisions are codified and the findings and declarations of the enacting legislation are not typically noted in statute. This ensures that statutes do not become unnecessarily long and unwieldy by including language a court will not typically look to in applying the law. If, however, a court cannot tell from the plain language of the statute how to apply the law, they may still refer to the findings and declarations of the enacting legislation to glean the Legislature's intent in enacting the law.
  - *"Notwithstanding any other law" should be struck:* Including the phrase "notwithstanding any other law" in a statute means that the statute will override other laws. For example, in this case, "notwithstanding any other law" may very well override parts of the State Administrative Manual and the Statewide Information Management Manual, in addition to other provisions in the Government Code and Public Contract Code, all of which regulate CDT and touch upon procurement. If there are provisions in any of those laws with which the author takes issue, those code sections should be addressed individually to avoid the unintended consequences that often accompany overly broad legislation.
  - *"Shall seek to achieve" should be clarified:* This bill would require that CDT "seek to achieve" specified goals when undertaking modular contracting. While "shall" is a term that *requires* an action on the part of CDT, "seek to achieve" is vague. The phrase creates ambiguity as to the amount of effort CDT must employ in seeking to reach the specified goals. The bill should instead require CDT undertake specified actions, "to the extent practicable". This would require CDT to achieve the goals outlined in the bill, unless circumstances make achieving any one of those goals impossible.
  - *Other technical and clarifying amendments.*

The following mockup reflects the amendments described above.

**THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:**

~~12114. (a)~~ The Legislature finds and declares that large-scale information technology acquisitions are best realized using modular contracting when all of the following occurs:

[Language of findings and declarations remains unchanged from bill in print.]

**SECTION 1. Section 12114 is added to the Public Contract Code, to read:**

~~(b)~~ 12114. (a) ~~Notwithstanding any other law,~~ The Department of Technology shall maximize, to the extent practicable, use of modular contracting, as defined in paragraph (3) of subdivision ~~(h)~~ (g), for large-scale information technology acquisitions.

~~(e)~~ (b) Modular contracting, as defined in paragraph (3) of subdivision ~~(h)~~ (g), shall include successive, interoperable increments. These increments shall be undertaken under one or more contracts to develop and implement the products and capabilities to deliver the larger information technology acquisition. Each increment, which can be contracted for and built sequentially or in parallel, shall have its own cost estimate, budget identifying full funding, schedule, performance expectations, and key deliverables for the product or capability it will develop and deliver. Each increment shall have its own development lifecycle, including planning, acquisition, development, and deployment, and shall be scoped in a way that it can be acquired independently so that the acquisition of any single increment does not commit the agency to acquiring any future increment.

~~(d)~~ (c) Using modular contracting, as authorized in subdivision (b), the Department of Technology shall, to the extent practicable: ~~seek to achieve all of the following goals:~~

- (1) Simplify management of large-scale information technology acquisition by breaking these undertakings into smaller increments.
- (2) Address complex information technology objectives incrementally, thereby increasing the likelihood of achieving workable solutions for attaining those objectives.
- (3) Provide for delivery, implementation, and testing of workable systems or solutions in discrete increments, each of which comprises a system or solution that is not dependent on a subsequent increment in order to perform its principal functions.
- (4) Provide an opportunity for subsequent increments of the acquisition to take advantage of any evolution in technology or needs that occur during conduct of the earlier increments.

~~(e)~~ (d) To the maximum extent practicable, a contract for an increment of an information technology acquisition using modular contracting shall be awarded within 180 days after the solicitation is issued. If the contract for that increment cannot be awarded within that period, the increment ~~should~~ shall be considered for cancellation.

~~(f)~~ (e) An increment of an information technology acquisition shall be delivered within 18 months after the solicitation resulting in award of the contract was issued.

~~(g)~~ (f) The Department of Technology shall develop a process for overseeing large-scale information technology acquisitions using modular contracting, as defined in paragraph (3) of subdivision ~~(h)~~ (g), including a process for approving and overseeing the development of increments. The process shall set expectations for state agencies to plan and develop cost estimates, develop an overall strategy, report progress toward completion, and integrate increments into the overall acquisition.

~~(h)~~ (g) As used in this section:

(1) “Information technology acquisition” means a project for the development, modernization, enhancement, or maintenance of a single information technology asset, or group of information technology assets with related functionality, and the subsequent operation of those assets in a production environment.

(2) (A) “Large-scale” means possessing a combination of elements that will function together to produce the capabilities required to realize an information technology acquisition. The elements may include, among other things, hardware, equipment, software, or any combination thereof, but exclude construction or other improvements to real property.

(B) An information technology acquisition is large scale if it is estimated to result in an eventual total expenditure exceeding two million five hundred thousand dollars (\$2,500,000).

(3) “Modular contracting” means a contractual approach that provides for incremental delivery, implementation, and testing of an information technology acquisition by dividing it into discrete increments.

7) **Related legislation:** AB 2558 (Mathis) would require CDT, by January 1, 2025, to establish and maintain a framework of policies, procedures, and requirements for the initiation, approval, implementation, management, oversight, and continuation of information technology projects that use a modular modernization approach, as described. The author of this bill opted to join as a co-author on AB 1806 and not move this bill.

8) **Double referral:** This bill was double-referred to the Assembly Committee on Accountability and Administrative Review.

## REGISTERED SUPPORT / OPPOSITION:

### Support

None on file

### Opposition

None on file

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