DRAFT CYBERSECURITY AUDIT REGULATIONS FOR CALIFORNIA PRIVACY PROTECTION AGENCY SEPTEMBER 8, 2023 BOARD MEETING



Statutory Provisions for Reference:

Delegation of rulemaking authority to the California Privacy Protection Agency as set forth in Civil Code section 1798.185, subdivision (a)(15):

Issuing regulations requiring businesses whose processing of consumers' personal information presents significant risk to consumers' privacy or security, to:

(A) Perform a cybersecurity audit on an annual basis, including defining the scope of the audit and establishing a process to ensure that audits are thorough and independent. The factors to be considered in determining when processing may result in significant risk to the security of personal information shall include the size and complexity of the business and the nature and scope of processing activities.

- (H) Audio, electronic, visual, thermal, olfactory, or similar information.
- (I) Professional or employment-related information.
- (J) Education information, defined as information that is not publicly available personally identifiable information as defined in the Family Educational Rights and Privacy Act (20 U.S.C. Sec. 1232g; 34 C.F.R. Part 99).
- (K) Inferences drawn from any of the information identified in this subdivision to create a profile about a consumer reflecting the consumer's preferences, characteristics, psychological trends, predispositions, behavior, attitudes, intelligence, abilities, and aptitudes.
- (L) Sensitive personal information."



¹ Civil Code section 1798.140, subdivision (v)(1), defines "personal information" as follows: "Personal information' means information that identifies, relates to, describes, is reasonably capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular consumer or household. Personal information includes, but is not limited to, the following if it identifies, relates to, describes, is reasonably capable of being associated with, or could be reasonably linked, directly or indirectly, with a particular consumer or household:

⁽A) Identifiers such as a real name, alias, postal address, unique personal identifier, online identifier, Internet Protocol address, email address, account name, social security number, driver's license number, passport number, or other similar identifiers.

⁽B) Any personal information described in subdivision (e) of Section 1798.80.

⁽C) Characteristics of protected classifications under California or federal law.

⁽D) Commercial information, including records of personal property, products or services purchased, obtained, or considered, or other purchasing or consuming histories or tendencies.

⁽E) Biometric information.

⁽F) Internet or other electronic network activity information, including, but not limited to, browsing history, search history, and information regarding a consumer's interaction with an internet website application, or advertisement.

⁽G) Geolocation data.

Reasonable security requirement as set forth in Civil Code section 1798.100, subdivision (e):

A business that collects a consumer's personal information shall implement reasonable security procedures and practices appropriate to the nature of the personal information to protect the personal information from unauthorized or illegal access, destruction, use, modification, or disclosure in accordance with Section 1798.81.5.²

Excerpts from Civil Code section 1798.81.5:

- (b) A business that owns, licenses, or maintains personal information³ about a California resident shall implement and maintain reasonable security procedures and practices appropriate to the nature of the information, to protect the personal information from unauthorized access, destruction, use, modification, or disclosure.
- (c) A business that discloses personal information about a California resident pursuant to a contract with a nonaffiliated third party that is not subject to subdivision (b) shall require by contract that the third party implement and maintain reasonable security procedures and practices appropriate to the nature of the information, to protect the personal information from unauthorized access, destruction, use, modification or disclosure.



² Civil Code section 1798.81.5, subdivision (d)(1), defines personal information as follows: "'Personal information' means either of the following:

⁽A) An individual's first name or first initial and the individual's last name in combination with any one or more of the following data elements, when either the name or the data elements are not encrypted or redacted:

⁽i) Social security number.

⁽ii) Driver's license number, California identification card number, tax identification number, passport number, military identification number, or other unique identification number issued on a government document commonly used to verify the identity of a specific individual.

⁽iii) Account number or credit or debit card number, in combination with any required security code, access code, or password that would permit access to an individual's financial account.

⁽iv) Medical information.

⁽v) Health insurance information.

⁽vi) Unique biometric data generated from measurements or technical analysis of human body characteristics, such as a fingerprint, retina, or iris image, used to authenticate a specific individual. Unique biometric data does not include a physical or digital photograph, unless used or stored for facial recognition purposes.

⁽vii) Genetic data.

⁽B) A username or email address in combination with a password or security question and answer that would permit access to an online account."

³ See supra note 2.

DRAFT CYBERSECURITY AUDIT REGULATIONS (EXCERPTS)

[ADDITIONS TO] § 7001. Definitions.

- (i) "Cybersecurity audit" means the annual cybersecurity audit that every business whose processing of consumers' personal information presents significant risk to consumers' security as set forth in section 7120, subsection (b), is required to complete.
- (j) "Cybersecurity program" means the policies, procedures, and practices that protect the security, confidentiality, integrity, and availability of personal information.
- (p) "Information system" means the resources (e.g., network, hardware, and software) organized for the processing of information, including the collection, use, disclosure, sale, sharing, and retention of personal information.
- (s) "Multi-Factor Authentication" means authentication through verification of at least two of the following types of authentication factors: (1) knowledge factors, such as a password; (2) possession factors, such as a token; or (3) inherence factors, such as a biometric characteristic.
- (aa) "Penetration Testing" means testing the security of an information system by attempting to circumvent or defeat its security features.
- (bb) "Privileged Account" means any authorized user account (i.e., an account designed to be used by an individual) or service account (i.e., an account designed to be used only by a service, not by an individual) that can be used to perform functions that other user accounts are not authorized to perform, including but not limited to the ability to add, change, or remove other accounts, or make configuration changes to an information system to make it more or less secure.
- (tt) "Zero Trust Architecture" means denying access to an information system and the information that it processes by default, and instead explicitly granting and enforcing only the minimal access required. Zero trust architecture is based upon the acknowledgment that threats exist both inside and outside of a business's information system, and it avoids granting access based upon any one attribute. For example, neither the use of valid credentials nor presence on the network would be sufficient to obtain access to information.

[ADDITIONS TO] § 7050. Service Providers and Contractors.

(g) A service provider or contractor shall, with respect to personal information that they collected pursuant to their written contract with the business, cooperate with the business in its completion of a cybersecurity audit pursuant to Article 9, including by making available to the business's auditor all relevant information that the auditor deems necessary for the auditor to complete the business's cybersecurity audit; and not misrepresenting in any manner any fact that the auditor deems relevant to the business's cybersecurity audit.



[MODIFICATIONS TO] § 7051. Contract Requirements for Service Providers and Contractors. [Green double-underline illustrates proposed additions to existing section 7051, subsection (a)(6).]

(a)(6) Require the service provider or contractor to comply with all applicable sections of the CCPA and these regulations, including—with respect to the personal information that it collected pursuant to the written contract with the business—providing the same level of privacy protection as required of businesses by the CCPA and these regulations. For example, the contract may require the service provider or contractor to cooperate with the business in responding to and complying with consumers' requests made pursuant to the CCPA, to assist the business in completing the business's cybersecurity audit pursuant to Article 9, to assist the business in conducting the business's risk assessment pursuant to Article 10, to assist the business in providing meaningful information to the consumer about its Automated Decisionmaking Technology, and to implement reasonable security procedures and practices appropriate to the nature of the personal information to protect the personal information from unauthorized or illegal access, destruction, use, modification, or disclosure in accordance with Civil Code section 1798.81.5.



[ADDITION] ARTICLE 9. CYBERSECURITY AUDITS

§ 7120. Requirement to Complete a Cybersecurity Audit.

- (a) Every business whose processing of consumers' personal information presents significant risk to consumers' security as set forth in subsection (b) shall complete a cybersecurity audit.
- (b) A business's processing of consumers' personal information presents significant risk to consumers' security if any of the following is true:
 - (1) The business meets the threshold set forth in Civil Code section 1798.140, subdivision (d)(1)(C) ["Derives 50 percent or more of its annual revenues from selling or sharing consumers' personal information"], in the preceding calendar year; or

OPTIONS FOR BOARD DISCUSSION FOR SECTION 7120, SUBSECTION (B)(2)

[Bracketed numbers included as placeholders to guide Board discussion]

Option I for section 7120, subsection (b)(2):

- (2) The business meets the threshold set forth in Civil Code section 1798.140, subdivision (d)(1)(A), ["As of January 1 of the calendar year, had annual gross revenues in excess of twenty-five million dollars (\$25,000,000) in the preceding calendar year. . . "]; and
 - (A) Processed the personal information of [TBD / one million or more consumers or households] in the preceding calendar year; or
 - (B) Processed the sensitive personal information of [TBD / 100,000 or more] consumers in the preceding calendar year; or
 - (C) Processed the personal information of [TBD / 100,000 or more] consumers that the business had actual knowledge were less than 16 years of age in the preceding calendar year.

Option II for section 7120, subsection (b)(2):

(2) The business has annual gross revenues in excess of [TBD].

Option III for section 7120, subsection (b)(2):

(2) The business had more than [TBD] employees.

§ 7121. Timing Requirements for Cybersecurity Audits.

(a) A business shall have 24 months from the effective date of these regulations to complete its first cybersecurity audit in compliance with the requirements in this Article.



(b) After the business's completion of its first cybersecurity audit pursuant to subsection (a), its subsequent cybersecurity audits shall be completed annually, and there shall be no gap in the months covered by successive cybersecurity audits.

§ 7122. Thoroughness and Independence of Cybersecurity Audits.

- (a) Every business required to complete a cybersecurity audit pursuant to this Article shall do so using a qualified, objective, independent professional ("auditor") using procedures and standards generally accepted in the profession of auditing.
 - (1) The auditor may be internal or external to the business but shall exercise objective and impartial judgment on all issues within the scope of the cybersecurity audit, shall be free to make decisions and assessments without influence by the business being audited, including the business's owners, managers, or employees; and shall not participate in activities that may compromise, or appear to compromise, the auditor's independence. For example, the auditor shall not develop, implement, or maintain the business's cybersecurity program, nor prepare the business's documents or participate in the business activities that the auditor may review in the current or subsequent cybersecurity audits.
 - (2) If a business uses an internal auditor, the auditor shall report regarding cybersecurity audit issues directly to the business's board of directors or governing body, not to business management that has direct responsibility for the business's cybersecurity program. If no such board or equivalent body exists, the internal auditor shall report to the business's highest-ranking executive that does not have direct responsibility for the business's cybersecurity program. The business's board of directors, governing body, or highest-ranking executive that does not have direct responsibility for the business's cybersecurity program shall conduct the auditor's performance evaluation and determine the auditor's compensation.
- (b) To enable the auditor to determine the scope of the cybersecurity audit and the criteria the cybersecurity audit will evaluate, the business shall make available to the auditor all relevant information about the business's cybersecurity program and information system; all relevant information about the business's use of service providers or contractors; and all other information in its possession, custody, or control that the auditor deems relevant to the cybersecurity audit.
- (c) The business shall disclose all facts relevant to the cybersecurity audit to the auditor, and shall not misrepresent in any manner any fact relevant to the cybersecurity audit.
- (d) The cybersecurity audit shall articulate its scope, articulate its criteria, and identify the specific evidence (including documents reviewed, sampling and testing performed, and interviews conducted) examined to make decisions and assessments, and explain why the scope of the



cybersecurity audit, the criteria evaluated, and the evidence that the auditor examined is (a) appropriate for auditing the business's cybersecurity program, taking into account the business's size, complexity, and the nature and scope of its processing activities; and (b) why the specific evidence examined is sufficient to justify the auditor's findings. No finding of any cybersecurity audit shall rely primarily on assertions or attestations by the business's management. Cybersecurity audit findings shall rely primarily upon the specific evidence (including documents reviewed, sampling and testing performed, and interviews conducted) that is deemed to be appropriate by the auditor.

- (e) The cybersecurity audit shall:
 - (1) Assess, document, and summarize each applicable component of the business's cybersecurity program set forth in section 7123;
 - (2) Specifically identify any gaps or weaknesses in the business's cybersecurity program;
 - (3) Specifically address the status of any gaps or weaknesses identified in any prior cybersecurity audit; and
 - (4) Specifically identify any corrections or amendments to any prior cybersecurity audits.
- (f) The cybersecurity audit shall, for each auditor, include the auditor's name, affiliation, and relevant qualifications to complete the cybersecurity audit in such detail as necessary to fully describe the nature of their qualifications; and the number of hours that each auditor worked on the cybersecurity audit.
- (g) The cybersecurity audit shall include a statement that is signed and dated by each auditor that certifies that the auditor completed an independent review of the business's cybersecurity program and information system, exercised objective and impartial judgment on all issues within the scope of the cybersecurity audit, and did not rely primarily on assertions or attestations by the business's management.
- (h) The cybersecurity audit shall be reported to the business's board of directors or governing body, or if no such board or equivalent body exists, to the highest-ranking executive in the business responsible for the business's cybersecurity program.
- (i) The cybersecurity audit shall include a statement that is signed and dated by a member of the board or governing body, or if no such board or equivalent body exists, the business's highest-ranking executive with authority to bind the business and who is responsible for the business's cybersecurity program. The statement shall include that individual's name and title, and shall certify that the business has not influenced or made any attempt to influence the auditor's decisions or assessments regarding the cybersecurity audit. The statement also shall certify that the business's board or governing body, or if no such board or equivalent body exists, that the



- highest-ranking executive in the business who is responsible for the business's cybersecurity program, has reviewed the cybersecurity audit and understands its findings.
- (j) The auditor shall retain all documents relevant to each cybersecurity audit for a minimum of five(5) years after completion of the cybersecurity audit.

§ 7123. Scope of Cybersecurity Audits.

(a) The cybersecurity audit shall assess and document the business's cybersecurity program that is appropriate to the business's size and complexity and the nature and scope of its processing activities, taking into account the state of the art and cost of implementation.



OPTIONS FOR BOARD CONSIDERATION FOR SECTION 7123, SUBSECTION (B)

Option I for section 7123, subsection (b):

- (b) The cybersecurity audit shall assess and document how the business's cybersecurity program considers and protects against the following negative impacts to consumers' security:
 - (1) Unauthorized access, destruction, use, modification, or disclosure of personal information; or unauthorized activity resulting in the loss of availability of personal information. This includes, for example, the deployment of ransomware on a business's information system that results in the business or a consumer being unable to engage in authorized access, use, modification, or disclosure of personal information that the business's information system was designed to enable.
 - (2) Impairing consumers' control over their personal information associated with the unauthorized access, destruction, use, modification, or disclosure of personal information; or unauthorized activity resulting in the loss of availability of personal information.
 - (3) Economic harm to consumers associated with the unauthorized access, destruction, use, modification, or disclosure of personal information; or unauthorized activity resulting in the loss of availability of personal information. This includes, for example, the direct and indirect costs associated with identity theft.
 - (4) Physical harm to consumers or to property associated with the unauthorized access, destruction, use, modification, or disclosure of personal information; or unauthorized activity resulting in the loss of availability of personal information.
 - (5) Psychological harm to consumers, including emotional distress, anxiety, embarrassment, fear, frustration, shame, and feelings of violation associated with the unauthorized access, destruction, use, modification, or disclosure of personal information; or unauthorized activity resulting in the loss of availability of personal information.
 - (6) Reputational harm to consumers, including stigmatization associated with the unauthorized access, destruction, use, modification, or disclosure of personal information; or unauthorized activity resulting in the loss of availability of personal information.



Option II for section 7123, subsection (b):

(b) The cybersecurity audit shall assess and document any risks from cybersecurity threats, including as a result of any cybersecurity incidents, that have materially affected or are reasonably likely to materially affect consumers.

The following two definitions are for Board consideration in conjunction with Option II:

"Cybersecurity incident" means an unauthorized occurrence, or a series of related unauthorized occurrences, on or conducted through a business's information systems that jeopardizes the confidentiality, integrity, or availability of a business's information systems or any information residing therein.

"Cybersecurity threat" means any potential unauthorized occurrence on or conducted through a business's information systems that may result in adverse effects on the confidentiality, integrity, or availability of a business's information systems or any information residing therein.

- (c) The cybersecurity audit shall assess and document each of the following components of the business's cybersecurity program with specificity, as applicable. If not applicable, the audit shall document and explain why the component is not necessary to the business's protection of personal information and how the safeguards that the business does have in place provide at least equivalent security:
 - (1) The business's establishment, implementation, and maintenance of its cybersecurity program, including its written documentation of its cybersecurity program.
 - (A) The cybersecurity audit shall include:
 - (i) The name(s) and title(s) of the qualified employee(s) responsible for the business's cybersecurity program; and
 - (ii) The date that the cybersecurity program and any evaluations thereof were presented to the business's board of directors or governing body or, if no such board or equivalent governing body exists, to the highestranking executive of the business responsible for the business's cybersecurity program;
 - (2) The safeguards the business uses to protect personal information from internal and external risks to the security, confidentiality, integrity, or availability of personal information, including by protecting against the negative impacts set forth in subsections (b)(1)–(6). These safeguards include:



- (A) Authentication, including:
 - Multi-factor authentication (including multi-factor authentication that is resistant to phishing attacks for employees, service providers, and contractors); and
 - (ii) Strong unique passwords or passphrases (e.g., passwords that are at least eight characters in length, not on the business's disallowed list of commonly passwords, and not reused).
- (B) Encryption of personal information, at rest and in transit;
- (C) Zero trust architecture (e.g., ensuring that connections within the business's information system are both encrypted and authenticated);
- (D) Account management and access controls, including:
 - (i) Restricting employees' privileges, and access to personal information, to what is necessary to perform their respective job functions, and revoking their privileges and access when their job functions no longer require them, including when their employment is terminated;
 - (ii) Restricting service providers' and contractors' privileges and access to personal information to what is necessary for the specific business purpose(s) set forth in, and in compliance with, the written contract between the business and the service provider or contractor required by the CCPA and section 7051;
 - (iii) Restricting the privileges and access of third parties to whom the business sells or shares personal information to the personal information that is necessary for the limited and specified purpose(s) set forth within the contract between the business and the third party required by the CCPA and section 7053;
 - (iv) Restricting the number of privileged accounts, restricting those privileged accounts' access functions to only those necessary to perform the account-holder's job, restricting the use of privileged accounts to when they are necessary to perform functions, and using a privilegedaccess management solution (e.g., to ensure just-in-time temporary assignment of privileged access);
 - (v) Restricting and monitoring the creation of new accounts, and ensuring that their access and privileges are limited as set forth in subsections (c)(2)(D)(i)-(iv); and



- (vi) Restricting and monitoring physical access to personal information (e.g., through the use of badges, secure physical file locations, and enforcement of clean-desk policies).
- (E) Inventory and management of personal information and the business's information system. This includes:
 - (i) Personal information inventories (e.g., maps and flows identifying where personal information is stored, and how it can be accessed) and the classification and tagging of personal information (e.g., how personal information is tagged and how those tags are used to control the use and disclosure of personal information);
 - (ii) Hardware and software inventories, and the use of allowlisting (i.e., discrete lists of authorized hardware and software to control what is permitted to connect to and execute on the business's information system); and
 - (iii) Hardware and software approval processes, and preventing the connection of unauthorized hardware and devices to the business's information system.
- (F) Secure configuration of hardware and software, including
 - (i) Software updates and upgrades;
 - (ii) Securing cloud-based environments;
 - (iii) Masking sensitive personal information (e.g., systematically removing the sensitive personal information or replacing it with asterisks) by default in web applications;
 - (iv) Security patch management (e.g., receiving systematic notifications of security-related software updates and upgrades; and identifying, deploying, and verifying their implementation); and
 - (v) Change management (i.e., processes and procedures to ensure that changes to information system(s) do not undermine existing safeguards).
- (G) Internal and external vulnerability scans, penetration testing, and vulnerability disclosure and reporting (e.g., bug bounty and ethical hacking programs);
- (H) Audit-log management, including the centralized storage, retention, and monitoring of logs;



- (I) Network monitoring and defenses, including the deployment of:
 - Bot-detection and intrusion-detection and -prevention systems (e.g., to detect unsuccessful login attempts, monitor the activity of authorized users; and detect unauthorized access, destruction, use, modification, or disclosure of personal information); or unauthorized activity resulting in the loss of availability of personal information; and
 - (ii) Data-loss-prevention systems (e.g., software to detect and prevent unauthorized access, use, or disclosure of personal information).
- (J) Antivirus and antimalware protections;
- (K) Segmentation of an information system (e.g., via properly configured firewalls, routers, switches);
- (L) Limitation and control of ports, services, and protocols;
- (M) Cybersecurity awareness, education, and training, including:
 - (i) Training for each employee (e.g., when their employment begins, annually thereafter, after a personal information security breach, as described in Civil Code section 1798.150); and
 - (ii) How the business maintains current knowledge of changing cybersecurity threats and countermeasures.
- (N) Secure development and coding best practices, including code-reviews and testing;
- (O) Oversight of service providers, contractors, and third parties to ensure compliance with sections 7051 and 7053;
- (P) Retention schedules and proper disposal of personal information no longer required to be retained, by (1) shredding, (2) erasing, or (3) otherwise modifying the personal information in those records to make it unreadable or undecipherable through any means;
- (Q) How the business manages its responses to security incidents (i.e., the business's incident response management).
 - (i) For the purposes of subsection (Q), "security incident" means an occurrence that actually or potentially jeopardizes the confidentiality, integrity, or availability of an information system or the information the system processes, or that constitutes a violation or imminent threat of violation of a cybersecurity program.



- (ii) The business's incident response management includes:
 - (a) The business's documentation of predetermined instructions or procedures to detect, respond to, limit the consequences of, and recover from malicious attacks against its information system (i.e., the business's incident response plan); and
 - (b) How the business tests its security-incident-response capabilities; and
- (R) Business-continuity and disaster-recovery plans, including data-recovery capabilities and backups.
- (3) For each of the applicable components set forth in subsections (c)(1)–(2), including the safeguards the business identifies in its policies and procedures, the cybersecurity audit shall describe, at a minimum, how the business implements and enforces compliance with them.
- (d) The cybersecurity audit shall:
 - (1) Assess and document the effectiveness of the components set forth in subsections (c)(1)–(3) in preventing the unauthorized access, destruction, use, modification, or disclosure of personal information; and preventing unauthorized activity resulting in the loss of availability of personal information;
 - (2) Identify and describe in detail the status of any gaps or weaknesses of the components set forth in subsections (c)(1)–(3); and
 - (3) Document the business's plan to address the gaps and weaknesses identified and described pursuant to subsection (d)(2), including the resources it has allocated to resolve them and the timeframe in which it will resolve them.
- (e) If the business was required to notify any agency with jurisdiction over privacy laws or other data processing authority in California, other states, territories, or countries of unauthorized access, destruction, use, modification, or disclosure of personal information; or unauthorized activity resulting in the loss of availability of personal information, the cybersecurity audit shall include a description of the required notification(s) as well as the date(s) and details of the activity that gave rise to the required notification(s) and any related remediation measures taken by the business.
- (f) If the business provided notifications to affected consumers pursuant to Civil Code section 1798.82, subdivision (a), the cybersecurity audit shall include a description of those notifications and, where applicable, a description of the notification to the Attorney General pursuant to Civil Code section 1798.82, subdivision (f).



- (g) The cybersecurity audit shall include the date(s) and details of any personal information security breaches, as described in Civil Code section 1798.150.
- (h) If the business has engaged in a cybersecurity audit, assessment, or evaluation that meets all of the requirements of this Article, the business is not required to complete a duplicative cybersecurity audit. However, the business shall specifically explain how the cybersecurity audit, assessment, or evaluation that it has completed meets all of the requirements set forth in this Article. The business shall address subsections (a)–(e) with specificity, including explaining how the cybersecurity audit, assessment, or evaluation addresses each safeguard set forth in subsections (c)(2)(A)–(R). If the cybersecurity audit, assessment, or evaluation does not meet all of the requirements of this Article, the business shall supplement the cybersecurity audit with any additional information required to meet all of the requirements of this Article.

§ 7124. Notice of Compliance.

- (a) Each business that is required to complete a cybersecurity audit pursuant to this Article shall submit to the Agency either:
 - (1) A written certification that the business complied with the requirements set forth in this Article during the 12 months that the audit covers; or
 - (2) A written acknowledgment that the business did not fully comply with the requirements set forth in this Article during the 12 months that the audit covers. The written acknowledgement shall:
 - (A) Identify all sections and subsections of this Article that the business has not complied with and describe the nature and extent of such noncompliance; and
 - (B) Provide a remediation timeline or confirmation that remediation has been completed.
- (b) The written certification or written acknowledgment shall be submitted to the Agency [timing and form of submission TBD] and shall identify the 12 months that the audit covers.
- (c) The written certification or written acknowledgment shall be signed by a member of the board or governing body, or if no such board or equivalent body exists, the business's highest-ranking executive with authority to bind the business. The signatory shall include their name and title.

