S2 3lr2724

By: Senator Hester

Introduced and read first time: February 6, 2023 Assigned to: Education, Energy, and the Environment

A BILL ENTITLED

1 AN ACT concerning

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State and Local Cybersecurity - Revisions

3 FOR the purpose of establishing the Director of Cybersecurity Preparedness in the Cyber 4 Preparedness Unit of the Maryland Department of Emergency Management; 5 establishing certain duties of the Director; specifying the amount of a certain annual 6 appropriation made by the Governor to the Unit; establishing that the State Chief Information Security Officer in the Office of Security Management reports to the 7 8 Governor; altering certain qualifications and duties of the State Chief Information 9 Security Officer; altering certain duties of the Office; altering certain duties of the 10 Secretary of Information Technology; altering the membership of the Modernize 11 Maryland Oversight Commission and providing for the appointment of the chair and 12 vice chair of the Commission; altering the duties of certain independent contractors 13 hired by the Department of Information Technology; establishing that certain 14 information related to cybersecurity incidents reported by local governments may 15 not be used in a certain manner; authorizing the Office to ensure compliance of an 16 agency's cybersecurity with cybersecurity standards in a certain manner; requiring 17 a certain independent contractor hired by the Department of Information Technology 18 to provide certain quarterly updates on its work; requiring a certain report by the Commission to include a certain evaluation; requiring the Department of 19 20 Information Technology to hire an independent contractor to conduct a certain 21 review; and generally relating to State and local cybersecurity.

- 22 BY repealing and reenacting, with amendments,
- 23 Article Public Safety
- 24 Section 14–104.1
- 25 Annotated Code of Maryland
- 26 (2022 Replacement Volume)
- 27 BY repealing and reenacting, without amendments,
- 28 Article State Finance and Procurement
- 29 Section 3.5–2A–02 and 3.5–301(a)

[Brackets] indicate matter deleted from existing law.



$\frac{1}{2}$	Annotated Code of Maryland (2021 Replacement Volume and 2022 Supplement)			
3 4 5 6 7 8	BY repealing and reenacting, with amendments, Article – State Finance and Procurement Section 3.5–2A–03, 3.5–2A–04(b)(11), 3.5–301(i), 3.5–303(a) and (d), 3.5–316, 3.5–317(b)(1), and 3.5–407(d) Annotated Code of Maryland (2021 Replacement Volume and 2022 Supplement)			
9 10 11 12 13	BY adding to Article – State Finance and Procurement Section 3.5–318 Annotated Code of Maryland (2021 Replacement Volume and 2022 Supplement)			
14 15 16	Chapter 242 of the Acts of the General Assembly of 2022			
17 18	SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:			
19	Article - Public Safety			
20	14–104.1.			
21	(a) (1) In this section the following words have the meanings indicated.			
22 23	(2) "Local government" includes local school systems, local school boards, and local health departments.			
24	(3) "Unit" means the Cyber Preparedness Unit.			
25	(b) (1) There is a Cyber Preparedness Unit in the Department.			
26 27	(2) (I) THE HEAD OF THE UNIT IS THE DIRECTOR OF CYBERSECURITY PREPAREDNESS.			
28 29 30 31	(II) THE DIRECTOR SHALL WORK IN COORDINATION WITH THE DIRECTOR OF LOCAL CYBERSECURITY IN THE OFFICE OF SECURITY MANAGEMENT TO PROVIDE TECHNICAL ASSISTANCE, COORDINATE RESOURCES, AND IMPROVE CYBERSECURITY PREPAREDNESS FOR UNITS OF LOCAL GOVERNMENT.			
32 33	[(2)] (3) In coordination with the State Chief Information Security Officer, the Unit shall:			

support local governments in developing a vulnerability 1 (i) 2 assessment and cyber assessment, including providing local governments with the 3 resources and information on best practices to complete the assessments; 4 develop and regularly update an online database of cybersecurity (ii) training resources for local government personnel, including technical training resources, 5 cybersecurity continuity of operations templates, consequence management plans, and 6 7 trainings on malware and ransomware detection; 8 (iii) assist local governments in: 9 the development of cybersecurity preparedness and 1. 10 response plans; 11 2. implementing best practices and guidance developed by 12 the State Chief Information Security Officer; and 13 3. complete identifying and acquiring resources 14 appropriate cybersecurity vulnerability assessments; 15 connect local governments to appropriate resources for any other purpose related to cybersecurity preparedness and response; 16 17 as necessary and in coordination with the National Guard, local (v) emergency managers, and other State and local entities, conduct regional cybersecurity 18 19 preparedness exercises; and 20 establish regional assistance groups to deliver and coordinate (vi) 21support services to local governments, agencies, or regions. 22 The Unit shall support the Office of Security Management in the [(3)] **(4)** 23 Department of Information Technology during emergency response efforts. 24Each local government shall report a cybersecurity incident, including (c) 25an attack on a State system being used by the local government, to the appropriate local 26emergency manager and the State Security Operations Center in the Department of 27 Information Technology [and to the Maryland Joint Operations Center in the Department] 28 in accordance with paragraph (2) of this subsection. 29 (2)For the reporting of cybersecurity incidents under paragraph (1) of this subsection, the State Chief Information Security Officer shall determine: 30 the criteria for determining when an incident must be reported; 31 (i)

the manner in which to report; and

(ii)

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1	(iii) the time period within which a report must be made.			
2 3 4	(3) The State Security Operations Center shall immediately notify appropriate agencies of a cybersecurity incident reported under this subsection through the State Security Operations Center.			
5 6 7	(d) (1) Five Position Identification Numbers (PINs) shall be created for the purpose of hiring staff to conduct the duties of the Maryland Department of Emergency Management Cybersecurity Preparedness Unit.			
8 9	(2) For fiscal year 2024 and each fiscal year thereafter, the Governor shall include in the annual budget bill an appropriation [of at least:			
10	(i) \$220,335 for 3 PINs for Administrator III positions; and			
11 12	(ii) \$137,643 for 2 PINs for Administrator II positions] SUFFICIENT FOR THE POSITIONS CREATED UNDER PARAGRAPH (1) OF THIS SUBSECTION.			
13	Article - State Finance and Procurement			
14	3.5-2A-02.			
15	There is an Office of Security Management within the Department.			
16	3.5-2A-03.			
17	(a) The head of the Office is the State Chief Information Security Officer.			
18	(b) The State Chief Information Security Officer shall:			
19	(1) be appointed by the Governor with the advice and consent of the Senate;			
20	(2) serve at the pleasure of the Governor; AND			
21	(3) be supervised by the [Secretary; and			
22 23	(4) serve as the chief information security officer of the Department] GOVERNOR.			
24 25	(c) An individual appointed as the State Chief Information Security Officer under subsection (b) of this section shall:			
26	(1) [at a minimum, hold a bachelor's degree;			
27	(2)] hold appropriate information technology or cybersecurity certifications;			

1	[(3)] (2)	have experience:
2	(i)	identifying, implementing, or assessing security controls;
3	(ii)	in infrastructure, systems engineering, or cybersecurity;
4 5 6	(iii) and incident response tea and	managing highly technical security, security operations centers, ams in a complex cloud environment and supporting multiple sites;
7 8	(iv) frameworks;	working with common information security management
9 10 11 12	•	have extensive knowledge of information technology and epts, best practices, and procedures, with an understanding of abilities and limitations to ensure the secure integration and works and systems; and
13	[(5)] (4)	have knowledge of current security regulations.
4	(d) The State C	Chief Information Security Officer shall:
15 16	(1) provi	de cybersecurity advice and recommendations to the Governor on
17 18	(2) DEVI	ELOP AND MAINTAIN A STATEWIDE CYBERSECURITY
19 20 21		CENTRALIZE THE MANAGEMENT AND DIRECTION OF ATEGY WITHIN THE EXECUTIVE BRANCH OF STATE THE CONTROL OF THE DEPARTMENT; AND
22 23 24	CYBERSECURITY PRE GOVERNMENT.	SERVE AS THE BASIS FOR BUDGET ALLOCATIONS FOR PAREDNESS FOR THE EXECUTIVE BRANCH OF STATE
25 26	(e) (1) (i) appointed by the State C	There is a Director of Local Cybersecurity, who shall be thief Information Security Officer.
27	(ii)	The Director of Local Cybersecurity shall:
28 29	Emergency Management	1. work in coordination with the Maryland Department of

cybersecurity preparedness for units of local government; AND

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1	2. IN CONSULTATION WITH THE MARYLANI
2	CYBERSECURITY COORDINATING COUNCIL, DEVELOP GUIDANCE ON CONSISTENT
3	CYBERSECURITY STRATEGIES FOR COUNTIES, MUNICIPAL CORPORATIONS, SCHOOL
4	SYSTEMS, AND ALL OTHER POLITICAL SUBDIVISIONS OF THE STATE.

- 5 (2) (i) There is a Director of State Cybersecurity, who shall be 6 appointed by the State Chief Information Security Officer.
- 7 (ii) The Director of State Cybersecurity is responsible for 8 implementation of this section with respect to units of State government.
- 9 (III) IN CONSULTATION WITH THE MARYLAND CYBERSECURITY
 10 COORDINATING COUNCIL, THE DIRECTOR OF STATE CYBERSECURITY SHALL
 11 ADVISE AND OVERSEE A CONSISTENT CYBERSECURITY STRATEGY FOR UNITS OF
 12 STATE GOVERNMENT, INCLUDING INSTITUTIONS UNDER THE CONTROL OF THE
 13 GOVERNING BOARDS OF THE PUBLIC INSTITUTIONS OF HIGHER EDUCATION.
- 14 (f) The Department shall provide the Office with sufficient staff to perform the 15 functions of this subtitle.
- 16 (G) THE GOVERNOR SHALL INCLUDE AN APPROPRIATION IN THE ANNUAL
 17 BUDGET BILL IN AN AMOUNT NECESSARY TO COVER THE COSTS OF IMPLEMENTING
 18 THE STATEWIDE CYBERSECURITY STRATEGY DEVELOPED UNDER SUBSECTION (D)
 19 OF THIS SECTION WITHOUT THE NEED FOR THE OFFICE TO OPERATE A
 20 CHARGE-BACK MODEL FOR CYBERSECURITY SERVICES PROVIDED TO OTHER UNITS
 21 OF STATE GOVERNMENT OR UNITS OF LOCAL GOVERNMENT.
- 22 3.5–2A–04.
- 23 (b) The Office shall:
- 24 (11) develop and maintain information technology security policy, 25 standards, and guidance documents, consistent with [best practices developed by the] A 26 WIDELY RECOGNIZED SECURITY STANDARD, INCLUDING:
- 27 (I) National Institute of Standards and Technology (NIST) 28 CYBERSECURITY FRAMEWORK, NIST 800–53, OR INTERNATIONAL ORGANIZATION 29 FOR STANDARDIZATION (ISO) ISO 27001; OR
- 30 (II) IN THE CASE OF ORGANIZATIONS HANDLING CONTROLLED 31 UNCLASSIFIED INFORMATION, NIST SP 800–171 OR THE CYBERSECURITY 32 MATURITY MODEL CERTIFICATION FROM THE U.S. DEPARTMENT OF DEFENSE;
- 33 3.5–301.

- 1 In this subtitle the following words have the meanings indicated. (a) 2 "Master plan" means the statewide information technology master plan [and (i) 3 statewide cybersecurity strategy]. 3.5 - 303.4 5 (a) The Secretary is responsible for carrying out the following duties: 6 developing, maintaining, revising, and enforcing information (1) 7 technology policies, procedures, and standards; providing technical assistance, advice, and recommendations to the 8 9 Governor and any unit of State government concerning information technology matters; 10 reviewing the annual project plan for each unit of State government to 11 make information and services available to the public over the Internet; 12 developing and maintaining a statewide information technology master (4) plan that will: 13 14 (i) centralize the management and direction of information technology policy within the Executive Branch of State government under the control of the 15 16 Department; 17 include all aspects of State information technology including (ii) telecommunications, security, data processing, and information management; 18 19 (iii) consider interstate transfers as a result of federal legislation and 20 regulation; 21(iv) ensure that the State information technology plan and related 22 policies and standards are consistent with State goals, objectives, and resources, and 23represent a long-range vision for using information technology to improve the overall 24effectiveness of State government; 25 include standards to assure nonvisual access to the information
- 26 and services made available to the public over the Internet; and

 27 (vi) allows a State agency to maintain the agency's own information
- (vi) allows a State agency to maintain the agency's own information technology unit that provides for information technology services to support the mission of the agency;
- 30 (5) [developing and maintaining a statewide cybersecurity strategy that 31 will:

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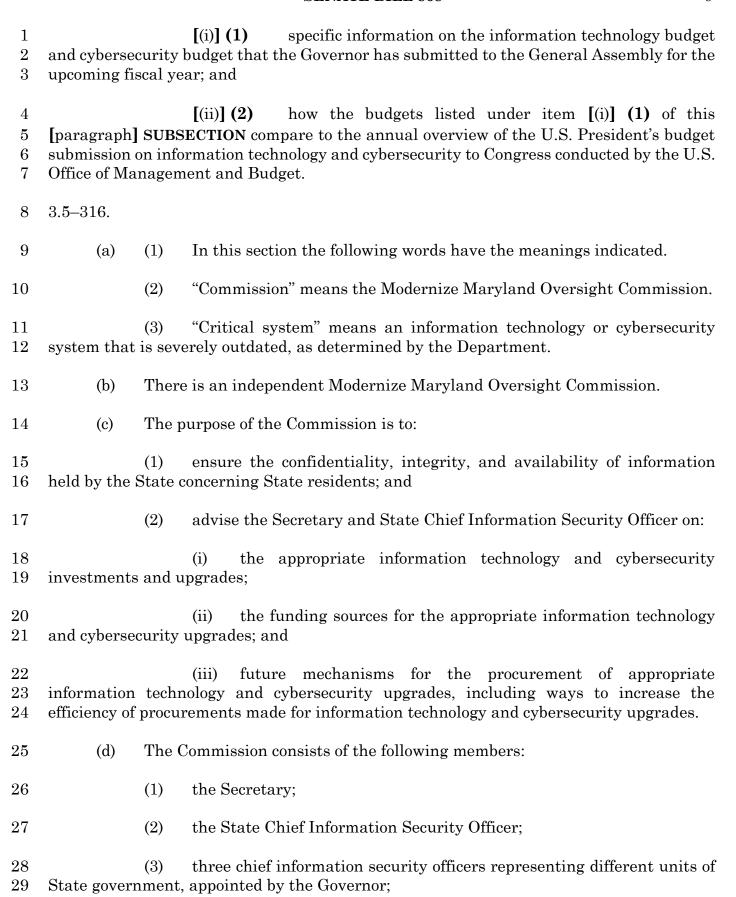
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- 1 centralize the management and direction of cybersecurity (i) 2 strategy within the Executive Branch of State government under the control of the 3 Department; and 4 (ii) serve as the basis for budget allocations for cybersecurity preparedness for the Executive Branch of State government: 5 6 adopting by regulation and enforcing nonvisual access standards to be (6)**1** 7 used in the procurement of information technology services by or on behalf of units of State 8 government in accordance with subsection (b) of this section; 9 (7)in consultation with the Maryland Cybersecurity Coordinating Council, 10 advising and overseeing a consistent cybersecurity strategy for units of State government, including institutions under the control of the governing boards of the public institutions 11 12 of higher education: 13 (8)**] (6)** advising and consulting with the Legislative and Judicial branches of State government regarding a cybersecurity strategy; 14 15 in consultation with the Maryland Cybersecurity Coordinating Council, developing guidance on consistent cybersecurity strategies for counties, municipal 16 17 corporations, school systems, and all other political subdivisions of the State; 18 upgrading information technology and cybersecurity-related (10)**] (7)** 19 State government infrastructure; and 20 [(11)] **(8)** annually evaluating: 21the feasibility of units of State government providing public (i) 22services using artificial intelligence, machine learning, commercial cloud computer 23services, device-as-a-service procurement models, and other emerging technologies; and the development of data analytics capabilities to enable 2425data-driven policymaking by units of State government. 26 (d) The Governor shall include an appropriation in the annual budget bill 27 in an amount necessary to cover the costs of implementing the statewide cybersecurity
- On or before January 31 each year, in a separate report or included **(2)** 32 within a general budget report, the Governor shall submit a report in accordance with § 33 2-1257 of the State Government Article to the Senate Budget and Taxation Committee and 34 the House Appropriations Committee that includes:

units of State government or units of local government.

master plan developed under subsection (a) of this section without the need for the

Department to operate a charge-back model for cybersecurity services provided to other



- 1 (4) one information technology modernization expert with experience in 2 the private sector, appointed by the Governor;
- 3 (5) one representative from the Maryland Chamber of Commerce with 4 knowledge of cybersecurity issues;
- 5 (6) ONE REPRESENTATIVE FROM THE MARYLAND CHAMBER OF COMMERCE WITH EXPERTISE IN INFORMATION TECHNOLOGY MODERNIZATION IN THE PRIVATE SECTOR;
- 8 [(6)] (7) two individuals who are end users of State information 9 technology systems AND WHO ARE NOT STATE EMPLOYEES, appointed by the Governor;
- 10 [(7)] (8) one representative from the Cybersecurity Association of 11 Maryland; [and]
- [(8)] (9) one individual who is either an instructor or a professional in the academic field of cybersecurity OR INFORMATION TECHNOLOGY MODERNIZATION at a college or university in the State, appointed by the Governor; AND
- 15 (10) ONE INDIVIDUAL WITH EXPERIENCE WORKING WITH THE STATE
 16 BUDGET AND APPROPRIATIONS, APPOINTED JOINTLY BY THE PRESIDENT OF THE
 17 SENATE AND THE SPEAKER OF THE HOUSE.
- 18 (e) The cochairs of the Joint Committee on Cybersecurity, Information 19 Technology, and Biotechnology shall serve as advisory, nonvoting members of the 20 Commission.
- 21 **(F)** THE CHAIR OF THE COMMISSION MAY APPOINT THREE ADDITIONAL 22 MEMBERS, AS NECESSARY.
- 23 (G) THE CHAIR AND VICE CHAIR OF THE COMMISSION SHALL BE ELECTED 24 FROM AMONG THE MEMBERS OF THE COMMISSION WHO ARE NOT EMPLOYED BY 25 STATE OR LOCAL GOVERNMENT.
- 26 [(f)] (H) The Commission shall:
- 27 (1) advise the Secretary AND THE STATE CHIEF INFORMATION 28 SECURITY OFFICER on a strategic roadmap with a timeline and budget that will:
- (i) require the updates and investments of critical information technology and cybersecurity systems identified by the Commission in the first recommendations reported under paragraph (2) of this subsection to be completed on or before December 31, 2025; and

- 1 (ii) require all updates and investments of information technology 2 and cybersecurity to be made on or before December 31, 2030;
- 3 (2) make periodic recommendations on investments in State information 4 technology structures based on the assessments completed in accordance with the 5 framework developed in § 3.5–317 of this subtitle;
- 6 (3) review and provide recommendations on the Department's basic 7 security standards for use of the network established under § 3.5–404(b) of this title; and
- 8 (4) each year, in accordance with § 2–1257 of the State Government Article, 9 report its findings and recommendations to the Senate Budget and Taxation Committee, 10 the Senate [Education, Health, and Environmental Affairs] **EDUCATION, ENERGY, AND** 11 **THE ENVIRONMENT** Committee, the House Appropriations Committee, the House Health 12 and Government Operations Committee, and the Joint Committee on Cybersecurity, 13 Information Technology, and Biotechnology.
- 14 **[**(g)**] (I)** The report submitted under subsection **[**(f)(4)**] (H)(4)** of this section 15 may not contain information about the security of an information system.
- 16 3.5–317.
- 17 (b) (1) The Department shall hire independent contractors to:
- 18 (i) develop a framework for investments in technology, INCLUDING 19 FOUNDATIONAL INFORMATION TECHNOLOGY PROJECTS THAT IMPACT MULTIPLE 20 UNITS OF STATE GOVERNMENT; and
- 21 (ii) at least once every 2 years, in accordance with the framework, 22 assess the cybersecurity and information technology systems in each unit of State 23 government.
- 24 **3.5–318.**
- (A) FOR FISCAL YEAR 2025 AND EACH FISCAL YEAR THEREAFTER, THE
 GOVERNOR SHALL INCLUDE IN THE ANNUAL BUDGET BILL AN APPROPRIATION IN
 AN AMOUNT THAT IS NOT LESS THAN 20% OF THE AGGREGATED AMOUNT
 APPROPRIATED FOR INFORMATION TECHNOLOGY RESOURCES IN THE ANNUAL
 BUDGET BILL FOR THE PRIOR FISCAL YEAR FOR THE DEDICATED PURPOSE
 ACCOUNT FOR CYBERSECURITY.
- 31 (B) THE APPROPRIATIONS FOR EACH FISCAL YEAR UNDER SUBSECTION (A)
 32 OF THIS SECTION SHALL BE USED TO SUPPLEMENT, NOT SUPPLANT, ANY EXISTING
 33 FUNDS IN THE DEDICATED PURPOSE ACCOUNT FOR CYBERSECURITY THAT MAY
 34 HAVE ACCRUED FROM A PRIOR FISCAL YEAR.

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- 2 (d) (1) Each local government shall report a cybersecurity incident, including 3 an attack on a State system being used by the local government, to the appropriate local 4 emergency manager and the State Security Operations Center in the Department in accordance with paragraph (2) of this subsection.
- 6 (2) For the reporting of cybersecurity incidents to local emergency 7 managers under subparagraph (i) of this paragraph, the State Chief Information Security 8 Officer shall determine:
- 9 (i) the criteria for determining when an incident must be reported;
- 10 (ii) the manner in which to report; and
- 11 (iii) the time period within which a report must be made.
- 12 (3) The State Security Operations Center shall immediately notify the 13 appropriate agencies of a cybersecurity incident reported under this subsection through the 14 State Security Operations Center.
- 15 (4) Information reported by a local government under this 16 Subsection may not be used by the State as a basis for imposing a fine, 17 RESTRICTING FUNDING, OR OTHERWISE PENALIZING THE LOCAL GOVERNMENT.

Chapter 242 of the Acts of 2022

SECTION 5. AND BE IT FURTHER ENACTED, That:

- 20 (a) (1) On or before June 30, 2023, each agency in the Executive Branch of State government shall certify to the Office of Security Management compliance with State 22 minimum cybersecurity standards established by the Department of Information 23 Technology.
- 24 (2) Except as provided in paragraph (3) of this subsection, certification 25 shall be reviewed by independent auditors, and any findings must be remediated.
- 26 (3) Certification for the Department of Public Safety and Correctional Services and any State criminal justice agency shall be reviewed by the Office of Legislative Audits, and any findings must be remediated.
- 29 (b) Except as provided in subsection (c) of this section, if an agency has not remediated [any] THE findings pertaining to State cybersecurity standards found by the independent audit required under subsection (a) of this section TO BECOME COMPLIANT WITH STATE MINIMUM CYBERSECURITY STANDARDS by July 1, 2024, the Office of

- 1 Security Management shall ensure compliance of an agency's cybersecurity with
- 2 cybersecurity standards through a shared service agreement [, administrative privileges, or
- 3 access to Network Maryland TO ONBOARD THE AGENCY TO DEPARTMENT OF
- 4 INFORMATION TECHNOLOGY CYBERSECURITY SERVICES AND PROVIDE OFFICE OF
- 5 SECURITY MANAGEMENT STAFF ADMINISTRATIVE PRIVILEGES TO THE AGENCY'S
- 6 INFORMATION TECHNOLOGY ASSETS.
- 7 (c) Subsection (b) of this section does not apply if a federal law or regulation 8 forbids the Office of Security Management from managing a specific system.
- 9 SECTION 6. AND BE IT FURTHER ENACTED, That:
- 10 (a) The Department of Information Technology shall hire a contractor to conduct 11 a performance and capacity assessment of the Department to:
- 12 (1) evaluate the Department's capacity to implement provisions of this Act;
- 13 and
- 14 (2) recommend additional resources necessary for the Department to
- 15 implement provisions of this title and meet future needs, including additional budget
- 16 appropriations, additional staff, altered contracting authority, and pay increases for staff.
- 17 (b) The contractor hired by the Department to complete the assessment and 18 report required by this section shall:
- 19 (1) PROVIDE QUARTERLY UPDATES ON ITS WORK UNDER THIS 20 SECTION TO THE COCHAIRS OF THE JOINT COMMITTEE ON CYBERSECURITY,
- 21 INFORMATION TECHNOLOGY, AND BIOTECHNOLOGY;
- 22 [(1)] (2) on or before December 1, 2023, submit an interim report of its
- 23 findings and recommendations to the Governor and, in accordance with § 2-1257 of the
- 24 State Government Article, the General Assembly; and
- 25 [(2)] (3) on or before December 1, 2024, submit a final report of its
- 26 findings and recommendations to the Governor and, in accordance with § 2–1257 of the
- 27 State Government Article, the General Assembly.
- SECTION 2. AND BE IT FURTHER ENACTED, That the report submitted by the
- 29 Modernize Maryland Oversight Commission under § 3.5–316(h) of the State Finance and
- 30 Procurement Article, as enacted by Section 1 of this Act, in calendar year 2024 shall include
- 31 an evaluation of services provided by the Department of Information Technology and an
- 32 assessment of whether those services meet the needs of the agencies being served.
- 33 SECTION 3. AND BE IT FURTHER ENACTED, That, on or before November 1,
- 34 2023, the Modernize Maryland Oversight Commission shall report to the General
- 35 Assembly, in accordance with § 2–1257 of the State Government Article, recommendations

- 1 to improve the format for the Secretary of Information Technology to report on major
- 2 information technology development projects under § 3.5-309 of the State Finance and
- 3 Procurement Article to meet the needs for strategic planning and investment.

4 SECTION 4. AND BE IT FURTHER ENACTED, That:

- the Department of Information Technology shall hire an independent contractor to review the efficiency and effectiveness of foundational information technology projects that impact multiple units of State government, including MDThink and OneStop, according to the framework developed under § 3.5–317(b) of the State Finance and Procurement Article, as enacted by Section 1 of this Act; and
- 10 (2) on or before November 1, 2023, the independent contractor hired under 11 item (1) of this section shall report its findings and recommendations to the General 12 Assembly, in accordance with § 2–1257 of the State Government Article.
- 13 SECTION 5. AND BE IT FURTHER ENACTED, That this Act shall take effect June $14-1,\,2023.$