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By: Delegate Rosenberg

Introduced and read first time: January 22, 2020

Assigned to: Ways and Means

A BILL ENTITLED

1 AN ACT concerning

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Election Law - Security of Election Systems

FOR the purpose of prohibiting the State Board of Elections from approving a contract with an election service provider unless the contract includes a clause requiring the election service provider to report to the State Administrator of Elections if any stage in the manufacturing of a component of the provider's election system occurred outside the United States; requiring the report to include certain information; requiring the State Administrator to forward a copy of the report to certain persons within a certain time period; altering the circumstances under which the State Board is prohibited from certifying a voting system; requiring a voting system selected, certified, and implemented by the State Board to consist of certain hardware, to use certain technology, and to operate using certain software; authorizing certain persons to share with independent experts for cybersecurity analysis a certain hardware component manifest and certain software source code, system build tools, and compilation parameters; requiring the State Board to decertify a previously certified voting system if the voting system has not been certified by the U.S. Election Assistance Commission as compliant with certain voting system guidelines within a certain period of time; providing that a voting system that has not been certified by the U.S. Election Assistance Commission as compliant with certain voting system guidelines within a certain period of time is unconditionally decertified on a certain date; providing that a voting system that was certified by the State Board before the effective date of this Act may be submitted for recertification in accordance with the requirements of this Act before a certain date; requiring that a voting system that was certified by the State Board before the effective date of this Act be decertified on a certain date if the voting system has not been recertified by the State Board in accordance with the requirements of this Act before that date; defining certain terms; providing for a delayed effective date; and generally relating to the security of election systems.

29 BY adding to

Article – Election Law



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1 2 3	Section 2–110 Annotated Code of Maryland (2017 Replacement Volume and 2019 Supplement)
4 5 6 7 8	BY repealing and reenacting, with amendments, Article – Election Law Section 9–102 and 9–103 Annotated Code of Maryland (2017 Replacement Volume and 2019 Supplement)
9	Preamble
10 11	WHEREAS, On June 27, 2019, the U.S. House of Representatives passed H.R. 2722, the "Securing America's Federal Elections Act" or the "SAFE Act"; and
12 13	WHEREAS, The SAFE Act would mandate numerous improvements in election security; and
14 15 16	WHEREAS, The SAFE Act would require election service providers to disclose whether any component of an election system was manufactured outside the United States; and
17 18 19	WHEREAS, The SAFE Act would require voting systems to be decertified if they do not comply with the most recent Voluntary Voting System Guidelines issued under the Help America Vote Act; and
20 21	WHEREAS, The SAFE Act would require voting systems to be manufactured in the United States; and
22 23 24 25	WHEREAS, The SAFE Act requires voting systems to consist of hardware that conforms to a hardware component manifest describing the supply chain for each hardware component that has been provided to government officials who may share it with independent experts for cybersecurity analysis; and
26 27 28 29 30	WHEREAS, The SAFE Act requires voting systems to use technology that prevents the operation of the voting system if any hardware component does not conform to a hardware component manifest describing the supply chain for each hardware component that has been provided to government officials who may share it with independent experts for cybersecurity analysis; and
31 32 33 34	WHEREAS, The SAFE Act requires voting systems to operate using software for which the source code, system build tools, and compilation parameters have been provided to government officials who may share it with independent experts for cybersecurity analysis; and

WHEREAS, The SAFE Act requires voting systems to use technology that prevents

the running of software on the voting system for which the source code, system build tools,

and compilation parameters have not been provided to government officials who may share it with independent experts for cybersecurity analysis; and

- WHEREAS, The SAFE Act requires voting systems to use technology that enables election officials, cybersecurity researchers, and voters to verify that the software running on the voting system was built from a specific, untampered—with version of the source code that was provided to government officials and uses the system build tools and compilation parameters that were provided to government officials; now, therefore,
- 8 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, 9 That the Laws of Maryland read as follows:
- 10 Article Election Law
- 11 **2–110.**

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- 12 (A) (1) IN THIS SECTION THE FOLLOWING WORDS HAVE THE MEANINGS 13 INDICATED.
- 14 (2) "APPROPRIATE PERSONS" MEANS:
- 15 (I) THE STATE BOARD;
- 16 (II) THE GOVERNOR;
- 17 (III) THE PRESIDENT OF THE SENATE OF MARYLAND;
- 18 (IV) THE SPEAKER OF THE HOUSE OF DELEGATES;
- 19 (V) THE ATTORNEY GENERAL; AND
- 20 (VI) THE DEPARTMENT OF INFORMATION TECHNOLOGY.
- 21 (3) "COMPONENT" INCLUDES ANY HARDWARE OR SOFTWARE 22 COMPONENT.
- 23 (4) "CONTRACT" MEANS AN AGREEMENT IN ANY FORM ENTERED
- 24 INTO BY A GOVERNMENTAL ENTITY FOR A PROCUREMENT AS DEFINED IN § 11–101
- 25 OF THE STATE FINANCE AND PROCUREMENT ARTICLE.
- 26 (5) "ELECTION SERVICE PROVIDER" MEANS ANY PERSON
- 27 PROVIDING, SUPPORTING, OR MAINTAINING AN ELECTION SYSTEM ON BEHALF OF
- 28 THE STATE BOARD OR A LOCAL BOARD, INCLUDING A CONTRACTOR OR VENDOR.

- 1 (6) "ELECTION SYSTEM" MEANS ANY INFORMATION SYSTEM, OTHER 2 THAN A VOTING SYSTEM, USED FOR THE MANAGEMENT, SUPPORT, OR 3 ADMINISTRATION OF AN ELECTION, INCLUDING:
- 4 (I) THE ONLINE VOTER REGISTRATION SYSTEM;
- 5 (II) THE VOTER REGISTRATION DATABASE;
- 6 (III) THE ONLINE BALLOT REQUEST, DELIVERY, OR MARKING
- 7 SYSTEMS;
- 8 (IV) THE ELECTRONIC POLLBOOKS;
- 9 (V) THE ELECTION MANAGEMENT SYSTEM; AND
- 10 (VI) THE SYSTEM FOR TABULATING OR REPORTING ELECTION
- 11 RESULTS.
- 12 (B) THE STATE BOARD MAY NOT APPROVE A CONTRACT WITH AN ELECTION
- 13 SERVICE PROVIDER UNLESS THE CONTRACT INCLUDES A CLAUSE REQUIRING THE
- 14 ELECTION SERVICE PROVIDER TO REPORT TO THE STATE ADMINISTRATOR IF ANY
- 15 STAGE IN THE MANUFACTURING OF A COMPONENT OF THE ELECTION SERVICE
- 16 PROVIDER'S ELECTION SYSTEM OCCURRED OUTSIDE THE UNITED STATES.
- 17 (C) THE REPORT REQUIRED UNDER SUBSECTION (B) OF THIS SECTION 18 SHALL INCLUDE:
- 19 (1) THE SPECIFIC COMPONENTS OF THE ELECTION SYSTEM THAT 20 WERE MANUFACTURED OUTSIDE THE UNITED STATES;
- 21 **(2)** THE FOREIGN NATION IN WHICH THE COMPONENTS WERE 22 MANUFACTURED;
- 23 (3) A DESCRIPTION OF THE MANUFACTURING WORK PERFORMED 24 OUTSIDE THE UNITED STATES; AND
- 25 (4) THE MEASURES TAKEN BY THE ELECTION SERVICE PROVIDER TO 26 ENSURE THAT THE MANUFACTURING PROCESS IS SECURE.
- 27 (D) WITHIN 5 DAYS AFTER RECEIVING A REPORT UNDER SUBSECTION (B) OF 28 THIS SECTION, THE STATE ADMINISTRATOR SHALL FORWARD A COPY OF THE
- 29 REPORT TO THE APPROPRIATE PERSONS.

1	9–102.							
2	(a)	In this section, a "voter-verifiable paper record" includes:						
3 4	precinct-ba	(1) a paper ballot prepared by the voter for the purpose of being read by a et—based optical scanner;						
5 6	board, whet	(2) a paper ballot prepared by the voter to be mailed to the applicable local rd, whether mailed from a domestic or an overseas location; and						
7		(3) a paper ballot created through the use of a ballot marking device.						
8 9	(b) decertificate	The State Board shall adopt regulations for the review, certification, and tion of voting systems.						
10 11	(c) systems.	The State Board shall periodically review and evaluate alternative voting						
12 13	(d) The State Board may not certify a voting system unless the State Board determines that:							
14		(1) the voting system will:						
15		(i) protect the secrecy of the ballot;						
16		(ii) protect the security of the voting process;						
17		(iii) count and record all votes accurately;						
18		(iv) accommodate any ballot used under this article;						
19		(v) protect all other rights of voters and candidates;						
20 21	that an aud	(vi) be capable of creating a paper record of all votes cast in order it trail is available in the event of a recount, including a manual recount; and						
22		(vii) provide a voter-verifiable paper record that:						
23 24	from any ot	1. is an individual document that is physically separated her similar document and not part of a continuous roll;						
25 26	the purpose	2. is sufficiently durable to withstand repeated handling for es of mandatory random audits and recounts; and						
27		3. uses ink that does not fade, smear, or otherwise degrade						

and obscure or obliterate the paper record over time;

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1	(2)	the voting system has been:						
2 3	(i) examined by an independent testing laboratory that is approved by the U.S. Election Assistance Commission; [and]							
4 5 6 7 8 9	(ii) [shown by the testing laboratory to meet the performance and test standards for electronic voting systems established by the Federal Election Commission or the U.S. Election Assistance Commission] CERTIFIED BY THE U.S. ELECTION ASSISTANCE COMMISSION AS COMPLIANT WITH THE MOST RECENT VOLUNTARY VOTING SYSTEM GUIDELINES ISSUED UNDER THE FEDERAL HELP AMERICA VOTE ACT; and							
10		(III) MANUFACTURED IN THE UNITED STATES; AND						
11 12	(3) system.	the public interest will be served by the certification of the voting						
13 14	(e) In determining whether a voting system meets the required standards, the State Board shall consider:							
15 16	components;	the commercial availability of the system and its replacement parts and						
17	(2)	the availability of continuing service for the system;						
18	(3)	the cost of implementing the system;						
19	(4)	the efficiency of the system;						
20	(5)	the likelihood that the system will malfunction;						
21	(6)	the system's ease of understanding for the voter;						
22	(7)	the convenience of voting afforded by the system;						
23	(8)	the timeliness of the tabulation and reporting of election returns;						
24	(9)	the potential for an alternative means of verifying the tabulation;						
25 26	(10) with Disabilities	accessibility for all voters with disabilities recognized by the Americans Act; and						
27	(11)	any other factor that the State Board considers relevant.						
28	(f) A vo	ting system selected, certified, and implemented under this section shall:						

1 2 3	afforded vo		_	de access to voters with disabilities that is equivalent to access disabilities without creating a segregated ballot for voters with	
4 5 6 7			t ballot	re the independent, private casting, inspection, verification, and its by voters with disabilities in an accessible media by both visual cluding synchronized audio output and enhanced visual display;	
8 9 10			rica Vo	ly with both the Americans with Disabilities Act, P.L. 101–336, the Act, P.L. 107–252, including accessibility standards adopted as ting System Guidelines pursuant to the Help America Vote Act.	
11 12	(g) provide acce	(1) ess for		ast one voting system in each polling place on election day shall with disabilities in compliance with subsection (f) of this section.	
13 14 15	available ar			State Board shall ensure that adequate backup equipment is by plans are established to ensure compliance with paragraph (1)	
16	(h)	Befor	e the s	election of a voting system, the State Board shall:	
17 18 19	(1) ensure that an accessible voting system conforms to the access requirements of the Voluntary Voting System Guidelines developed in accordance with the Help America Vote Act in effect at the time of selection; and				
20 21	to assess its	(2) s access		act an accessibility and usability evaluation of the voting system and usability by voters with disabilities, including:	
22			(i)	a public demonstration of the system; and	
23 24	voters with	disabi	(ii) lities.	an evaluation by individuals representing a cross-section of	
25	(I)	(1)	IN TH	HIS SUBSECTION, "APPROPRIATE PERSONS" MEANS:	
26			(I)	THE STATE BOARD;	
27			(II)	THE GOVERNOR;	
28			(III)	THE PRESIDENT OF THE SENATE OF MARYLAND;	
29			(IV)	THE SPEAKER OF THE HOUSE OF DELEGATES;	
30			(v)	THE ATTORNEY GENERAL; AND	

- 1 (VI) THE DEPARTMENT OF INFORMATION TECHNOLOGY.
- 2 (2) A VOTING SYSTEM SELECTED, CERTIFIED, AND IMPLEMENTED
- 3 UNDER THIS SECTION SHALL:
- 4 (I) CONSIST OF HARDWARE THAT DEMONSTRABLY CONFORMS
- 5 TO A HARDWARE COMPONENT MANIFEST DESCRIBING THE SUPPLY CHAIN FOR EACH
- 6 HARDWARE COMPONENT THAT HAS BEEN PROVIDED TO THE APPROPRIATE
- 7 PERSONS:
- 8 (II) USE TECHNOLOGY THAT PREVENTS THE OPERATION OF THE
- 9 VOTING SYSTEM IF ANY HARDWARE COMPONENTS DO NOT MEET THE
- 10 REQUIREMENTS OF ITEM (I) OF THIS PARAGRAPH;
- 11 (III) OPERATE USING SOFTWARE FOR WHICH THE SOURCE CODE,
- 12 SYSTEM BUILD TOOLS, AND COMPILATION PARAMETERS HAVE BEEN PROVIDED TO
- 13 THE APPROPRIATE PERSONS;
- 14 (IV) USE TECHNOLOGY THAT PREVENTS THE RUNNING OF
- 15 SOFTWARE ON THE VOTING SYSTEM THAT DOES NOT MEET THE REQUIREMENTS OF
- 16 ITEM (III) OF THIS PARAGRAPH; AND
- 17 (V) USE TECHNOLOGY THAT ENABLES ELECTION OFFICIALS,
- 18 CYBERSECURITY RESEARCHERS, AND VOTERS TO VERIFY THAT THE SOFTWARE
- 19 RUNNING ON THE VOTING SYSTEM:
- 20 1. WAS BUILT FROM A SPECIFIC, UNTAMPERED-WITH
- 21 VERSION OF THE SOURCE CODE THAT IS DESCRIBED IN ITEM (III) OF THIS
- 22 PARAGRAPH; AND
- 23 USES THE SYSTEM BUILD TOOLS AND COMPILATION
- 24 PARAMETERS THAT ARE DESCRIBED IN ITEM (III) OF THIS PARAGRAPH.
- 25 (3) AN APPROPRIATE PERSON MAY SHARE WITH INDEPENDENT
- 26 EXPERTS FOR CYBERSECURITY ANALYSIS:
- 27 (I) THE HARDWARE COMPONENT MANIFEST THAT WAS
- 28 PROVIDED TO THE APPROPRIATE PERSON UNDER PARAGRAPH (2)(I) OF THIS
- 29 SUBSECTION; AND
- 30 (II) THE SOFTWARE SOURCE CODE, SYSTEM BUILD TOOLS, AND
- 31 COMPILATION PARAMETERS THAT WERE PROVIDED TO THE APPROPRIATE PERSON
- 32 UNDER PARAGRAPH (2)(III) OF THIS SUBSECTION.

1 [(i)] **(J)** (1) The State Board shall adopt regulations relating to requirements 2 for each voting system selected and certified under § 9–101 of this subtitle. 3 (2)The regulations shall specify the procedures necessary to assure that 4 the standards of this title are maintained, including: 5 (i) a description of the voting system; a public information program by the local board, at the time of 6 7 introduction of a new voting system, to be directed to all voters, candidates, campaign 8 groups, schools, and news media in the county; 9 (iii) local election officials' responsibility for management of the 10 system; 11 the actions required to assure the security of the voting system; (iv) 12 the supplies and equipment required; (v) 13 (vi) the storage, delivery, and return of the supplies and equipment necessary for the operation of the voting system; 14 15 standards for training election officials in the operation and use 16 of the voting system; 17 (viii) before each election and for all ballot styles to be used, testing by the members of the local board to ensure the accuracy of tallying, tabulation, and reporting 18 of the vote, and observing of that testing by representatives of political parties and of 19 20 candidates who are not affiliated with political parties; 21the number of voting stations or voting booths required in each 22polling place, in relation to the number of registered voters assigned to the polling place; 23 (x) the practices and procedures in each polling place appropriate to the operation of the voting system; 2425assuring ballot accountability in systems using a document (xi) 26ballot; 27 the actions required to tabulate votes; and (xii) (xiii) postelection review and audit of the system's output. 2829 Certification of a voting system is not effective until the regulations

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applicable to the voting system have been adopted.

- 1 9–103.
- 2 (a) The State Board:
- 3 (1) may decertify a voting system previously certified if the State Board determines that the system no longer merits certification; and
- 5 (2) shall decertify a previously certified voting system if:
- 6 (I) the voting system no longer meets one or more of the standards 7 in § 9–102(d)(1)(i) through (iii) of this subtitle; **OR**
- 8 (II) THE VOTING SYSTEM HAS NOT BEEN CERTIFIED BY THE U.S.
- 9 ELECTION ASSISTANCE COMMISSION AS COMPLIANT WITH THE MOST RECENT
- 10 VOLUNTARY VOTING SYSTEM GUIDELINES ISSUED UNDER THE FEDERAL HELP
- 11 AMERICA VOTE ACT WITHIN 2 YEARS AFTER THE ADOPTION OF THE GUIDELINES.
- 12 (b) (1) [The] EXCEPT AS PROVIDED IN PARAGRAPH (2) OF THIS SUBSECTION, THE State Board shall determine the effective date and conditions of the decertification.
- 15 (2) A VOTING SYSTEM THAT HAS NOT BEEN CERTIFIED BY THE U.S.
- 16 ELECTION ASSISTANCE COMMISSION AS COMPLIANT WITH THE MOST RECENT
- 17 VOLUNTARY VOTING SYSTEM GUIDELINES ISSUED UNDER THE FEDERAL HELP
- 18 AMERICA VOTE ACT WITHIN 2 YEARS AFTER THE ADOPTION OF THE GUIDELINES IS
- 19 UNCONDITIONALLY DECERTIFIED ON THE DATE THAT IS 2 YEARS AFTER THE DATE
- 20 ON WHICH THE GUIDELINES WERE ADOPTED.
- SECTION 2. AND BE IT FURTHER ENACTED, That a voting system that was certified by the State Board of Elections before the effective date of this Act:
- 23 (1) may be submitted for recertification by the State Board in accordance
- 24 with § 9–102 of the Election Law Article, as enacted by Section 1 of this Act, before January
- 25 1, 2023; and
- 26 (2) is unconditionally decertified on January 1, 2023, if the voting system
- 27 has not been recertified by the State Board in accordance with § 9–102 of the Election Law
- 28 Article, as enacted by Section 1 of this Act, before January 1, 2023.
- 29 SECTION 3. AND BE IT FURTHER ENACTED, That this Act shall take effect
- 30 January 1, 2021.