

117TH CONGRESS
1ST SESSION

H. R. 5358

To direct the Secretary of Homeland Security to establish an election research program to test the security of election systems, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 24, 2021

Mr. BACON introduced the following bill; which was referred to the Committee on House Administration, and in addition to the Committee on Homeland Security, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To direct the Secretary of Homeland Security to establish an election research program to test the security of election systems, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. ELECTION RESEARCH PROGRAM.**

4 (a) IN GENERAL.—Subtitle A of title XXII of the
5 Homeland Security Act of 2002 (6 U.S.C. 651 et seq.)
6 is amended by adding at the end the following new section:

1 **“SEC. 2218. ELECTION RESEARCH PROGRAM.**

2 “(a) ESTABLISHMENT OF ELECTION RESEARCH
3 PROGRAM.—

4 “(1) IN GENERAL.—Not later than 180 days
5 after the date of the enactment of this section, the
6 Secretary, in coordination with the heads of election
7 service providers, shall establish and administer an
8 election research program to test each election sys-
9 tem provided by each election service provider
10 (under fair, reasonable, and nondiscriminatory
11 terms) on behalf of an election agency to identify po-
12 tentially vulnerable information.

13 “(2) TESTING.—In carrying out the program
14 required under paragraph (1), qualified independent
15 security researchers shall apply the methodology de-
16 veloped pursuant to paragraph (3) to each election
17 system provided pursuant to paragraph (1) to iden-
18 tify potentially vulnerable information.

19 “(3) METHODOLOGY.—The Secretary, in con-
20 sultation with the Director, shall develop a method-
21 ology to be used by independent security researchers
22 to test each election system provided by each election
23 solution provider to identify potentially vulnerable
24 information.

25 “(4) QUALIFICATIONS FOR QUALIFIED INDE-
26 PENDENT RESEARCHER.—The Secretary, in con-

1 sultation with the Director of the Cybersecurity and
2 Infrastructure Security Agency, shall establish the
3 qualifications for the independent security research-
4 ers referred to in subsection paragraph (3).

5 “(b) COORDINATED VULNERABILITY DISCLOSURE
6 GUIDELINES.—Not later than 180 days after the date of
7 the enactment of this section, the Secretary, in consulta-
8 tion with the Commissioners of the Election Assistance
9 Commission, cybersecurity researchers, and covered indus-
10 try experts, shall establish policies and procedures for the
11 processing and resolution of potentially vulnerable infor-
12 mation relating to an election system, to the extent prac-
13 ticable, aligned with Standards 29147 and 30111 of the
14 International Standards Organization, including—

15 “(1) processes for an election service provider
16 to—

17 “(A) receive information relating to poten-
18 tially vulnerable information relating to an elec-
19 tion system; and

20 “(B) disseminate resolution information re-
21 lating to potentially vulnerable information re-
22 lating to an election system; and

23 “(2) guidance, such as the Guide to Vulner-
24 ability Reporting for America’s Election Administra-
25 tors, with respect to the information items to be pro-

1 duced through the implementation of the vulner-
2 ability disclosure process of the election service pro-
3 vider.

4 “(c) DEFINITIONS.—In this section:

5 “(1) COVERED FIELD.—The term ‘covered
6 field’ means computer science, engineering, informa-
7 tion science, information systems management,
8 mathematics, operations research, statistics, or tech-
9 nology management.

10 “(2) COVERED INDUSTRY EXPERT.—The term
11 ‘covered industry expert’ means an individual who
12 has—

13 “(A) successfully completed 2 full years of
14 progressively higher level graduate education
15 leading to a Master’s or equivalent graduate de-
16 gree from an accredited institution of higher
17 education (given the meaning of such term in
18 section 101 of the Higher Education Act of
19 1965 (20 U.S.C. 1001)) in a covered field; or

20 “(B) a degree that requires at least 24 se-
21 mester hours in a covered field required the de-
22 velopment or adaptation of applications, sys-
23 tems or networks.

1 “(3) DIRECTOR.—The term ‘Director’ means
2 the Director of the National Institute of Standards
3 and Technology.

4 “(4) ELECTION AGENCY.—The term ‘election
5 agency’ means the Federal Election Commission.

6 “(5) ELECTION SERVICE PROVIDER.—The term
7 ‘covered election service provider’ means a private
8 sector entity which develops, manufactures, sells,
9 and/or implements and maintains technology that
10 enables the administration of elections. Including
11 but not limited to, voting systems, electronic
12 pollbooks, election management systems, and voter
13 registration systems.

14 “(6) ELECTION SYSTEM.—The term ‘election
15 system’ means—

16 “(A) the total combination of mechanical,
17 electromechanical, or electronic equipment (in-
18 cluding the software, firmware, and documenta-
19 tion required to program, control, and support
20 the equipment) that is used to—

21 “(i) define ballots;

22 “(ii) cast and count votes;

23 “(iii) report or display election results;

24 and

1 “(iv) maintain and produce any audit
2 trail information; and

3 “(B) the practices and associated docu-
4 mentation used to—

5 “(i) identify system components and
6 versions of such components;

7 “(ii) test the system during its devel-
8 opment and maintenance;

9 “(iii) maintain records of system er-
10 rors and defects;

11 “(iv) determine specific system
12 changes to be made to a system after the
13 initial qualification of the system; and

14 “(v) make available any materials to
15 the voter (such as notices, instructions,
16 forms, or paper ballots).

17 “(7) POTENTIALLY VULNERABLE INFORMA-
18 TION.—The term ‘potential vulnerability informa-
19 tion’ means a flaw in code or design that creates a
20 potential point of security compromise for an end-
21 point or network.”.

22 (b) CLERICAL AMENDMENT.—The table of contents
23 in section 1(b) of the Homeland Security Act of 2002 is

- 1 amended by inserting after the item relating to section
- 2 2217 the following new item:

“2218. Election research program.”

