118TH CONGRESS 1ST SESSION	S	
101 02001011		

To support research on privacy enhancing technologies and promote responsible data use, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Ms. Cortez Masto (for herself and Mrs. Fischer) introduced the following bill; which was read twice and referred to the Committee on

A BILL

To support research on privacy enhancing technologies and promote responsible data use, 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. SHORT TITLE.
- This Act may be cited as the "Promoting Digital Pri-
- 5 vacy Technologies Act".
- 6 SEC. 2. PROMOTING PRIVACY ENHANCING TECHNOLOGIES.
- 7 (a) Definition of Privacy Enhancing Tech-
- 8 Nology.—In this section the term "privacy enhancing
- 9 technology" means any software or hardware solution,
- 10 technical processes, or other technological means of pro-

tecting an individual's privacy and the confidentiality of 1 data, which may include— 2 3 (1)de-identification, anonymization and 4 pseudonymization technologies or techniques, fil-5 tering tools, anti-tracking technology, differential 6 privacy tools, synthetic data generation tools, cryp-7 tographic techniques (such as secure multi-party 8 computation and homomorphic encryption), and sys-9 tems for federated learning; and 10 (2) any other software or hardware solution, 11 technical processes, or other technological means 12 that the Director of the National Science Founda-13 tion, in consultation with the Director of the Na-14 tional Institute of Standards and Technology, deter-15 mines to be a technology that enhances privacy. 16 (b) NATIONAL SCIENCE FOUNDATION SUPPORT OF RESEARCH ON PRIVACY ENHANCING TECHNOLOGY.—The Director of the National Science Foundation, in consulta-18 tion with other relevant Federal agencies (as determined 19 20 by the Director), shall support merit-reviewed and com-21 petitively awarded research on privacy enhancing tech-22 nologies, which may include— 23

(1) fundamental research on technologies for

de-identification, pseudonymization, anonymization,

24

1	or obfuscation to protect individuals' privacy in data
2	sets;
3	(2) fundamental research on algorithms, ma-
4	chine learning, and other computational processes or
5	tools used to protect individual privacy when col-
6	lecting, storing, sharing, aggregating, or analyzing
7	data;
8	(3) fundamental research on technologies that
9	promote data minimization principles in data collec-
10	tion, sharing, transfers, retention, and analytics;
11	(4) research awards on privacy enhancing tech-
12	nologies coordinated with other relevant Federal
13	agencies and programs;
14	(5) research on barriers to, and opportunities
15	for, the adoption of privacy enhancing technologies,
16	including studies on effective business models for
17	privacy enhancing technologies; and
18	(6) international cooperative research, awards,
19	challenges, and pilot projects on privacy enhancing
20	technologies with key United States allies and part-
21	ners.
22	(c) Integration Into the Computer and Net-
23	WORK SECURITY PROGRAM.—Subparagraph (D) of sec-
24	tion 4(a)(1) of the Cyber Security Research and Develop-

1	ment Act (15 U.S.C. 7403(a)(1)(D)) is amended to read
2	as follows:
3	"(D) privacy enhancing technologies and
4	confidentiality;".
5	(d) Coordination With the National Institute
6	OF STANDARDS AND TECHNOLOGY AND OTHER STAKE-
7	HOLDERS.—
8	(1) In General.—The Director of the Office of
9	Science and Technology Policy, acting through the
10	Networking and Information Technology Research
11	and Development Program, shall coordinate with the
12	Director of the National Science Foundation, the Di-
13	rector of the National Institute of Standards and
14	Technology, and the Federal Trade Commission to
15	accelerate the development and use of privacy en-
16	hancing technologies.
17	(2) Outreach.—The Director of the National
18	Institute of Standards and Technology shall conduct
19	outreach to—
20	(A) receive input from private, public, and
21	academic stakeholders on the development and
22	potential uses of privacy enhancing tech-
23	nologies; and
24	(B) develop ongoing public and private sec-
25	tor engagement to create and disseminate vol-

1	untary, consensus-based resources to increase
2	the integration of privacy enhancing tech
3	nologies in data collection, sharing, transfers
4	retention, and analytics by the public and pri
5	vate sectors.
6	(e) Report on Privacy Enhancing Technology
7	RESEARCH.—Not later than 3 years after the date of en
8	actment of this Act, the Director of the Office of Science
9	and Technology Policy, acting through the Networking
10	and Information Technology Research and Developmen
11	Program, shall, in coordination with the Director of the
12	National Science Foundation, the Director of the National
13	Institute of Standards and Technology, and the Chair of
14	the Federal Trade Commission, submit to the Committee
15	on Commerce, Science, and Transportation of the Senate
16	the Committee on Science, Space, and Technology of the
17	House of Representatives, and the Committee on Energy
18	and Commerce of the House of Representatives, a repor
19	containing—
20	(1) the progress of research on privacy enhance
21	ing technologies;
22	(2) the progress of the development of vol
23	untary resources described under subsection
24	(d)(2)(B); and

6

AEG23435 TWL S.L.C.

1 (3) any policy recommendations that could fa-2 cilitate and improve communication and coordination 3 among the private sector, the National Science 4 Foundation, and relevant Federal agencies through 5 the implementation of privacy enhancing tech-6 nologies.