

116TH CONGRESS  
2D SESSION

# S. 4981

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

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IN THE SENATE OF THE UNITED STATES

DECEMBER 8, 2020

Ms. CORTEZ MASTO (for herself and Mrs. FISCHER) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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## 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.**

4 This Act may be cited as the “Promoting Digital Pri-  
5 vacy Technologies Act”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

8 (1) **PERSONAL DATA.**—The term “personal  
9 data” means information that identifies, is linked, or

1 is reasonably linkable to, an individual or a con-  
2 sumer device, including derived data.

3 (2) PRIVACY ENHANCING TECHNOLOGY.—The  
4 term “privacy enhancing technology”—

5 (A) means any software solution, technical  
6 processes, or other technological means of en-  
7 hancing the privacy and confidentiality of an in-  
8 dividual’s personal data in data or sets of data;  
9 and

10 (B) includes anonymization and pseudony-  
11 mization techniques, filtering tools, anti-track-  
12 ing technology, differential privacy tools, syn-  
13 thetic data, and secure multi-party computa-  
14 tion.

15 **SEC. 3. NATIONAL SCIENCE FOUNDATION SUPPORT OF RE-**  
16 **SEARCH ON PRIVACY ENHANCING TECH-**  
17 **NOLOGY.**

18 The Director of the National Science Foundation, in  
19 consultation with other relevant Federal agencies (as de-  
20 termined by the Director), shall support merit-reviewed  
21 and competitively awarded research on privacy enhancing  
22 technologies, which may include—

23 (1) fundamental research on technologies for  
24 de-identification, pseudonymization, anonymization,

1 or obfuscation of personal data in data sets while  
 2 maintaining fairness, accuracy, and efficiency;

3 (2) fundamental research on algorithms and  
 4 other similar mathematical tools used to protect in-  
 5 dividual privacy when collecting, storing, sharing, or  
 6 aggregating data;

7 (3) fundamental research on technologies that  
 8 promote data minimization principles in data collec-  
 9 tion, sharing, and analytics; and

10 (4) research awards on privacy enhancing tech-  
 11 nologies coordinated with other relevant Federal  
 12 agencies and programs.

13 **SEC. 4. INTEGRATION INTO THE COMPUTER AND NETWORK**  
 14 **SECURITY PROGRAM.**

15 Subparagraph (D) of section 4(a)(1) of the Cyber Se-  
 16 curity Research and Development Act (15 U.S.C.  
 17 7403(a)(1)(D)) is amended to read as follows:

18 “(D) privacy enhancing technologies and  
 19 confidentiality;”.

20 **SEC. 5. COORDINATION WITH THE NATIONAL INSTITUTE OF**  
 21 **STANDARDS AND TECHNOLOGY AND OTHER**  
 22 **STAKEHOLDERS.**

23 (a) IN GENERAL.—The Director of the Office of  
 24 Science and Technology Policy, acting through the Net-  
 25 working and Information Technology Research and Devel-

1 opment Program, shall coordinate with the Director of the  
2 National Science Foundation, the Director of the National  
3 Institute of Standards and Technology, and the Federal  
4 Trade Commission to accelerate the development and use  
5 of privacy enhancing technologies.

6 (b) OUTREACH.—The Director of the National Insti-  
7 tute of Standards and Technology shall conduct outreach  
8 to—

9 (1) receive input from private, public, and aca-  
10 demic stakeholders, including the National Institutes  
11 of Health and the Centers for Disease Control and  
12 Prevention for the purpose of facilitating public  
13 health research, on the development of privacy en-  
14 hancing technologies; and

15 (2) develop ongoing public and private sector  
16 engagement to create and disseminate voluntary,  
17 consensus-based resources to increase the integra-  
18 tion of privacy enhancing technologies in data collec-  
19 tion, sharing, and analytics by the public and private  
20 sectors.

21 **SEC. 6. REPORT ON RESEARCH AND STANDARDS DEVELOP-**  
22 **MENT.**

23 Not later than 2 years after the date of enactment  
24 of this Act, the Director of the Office of Science and Tech-  
25 nology Policy, acting through the Networking and Infor-

1 mation Technology Research and Development Program,  
2 shall, in coordination with the Director of the National  
3 Science Foundation and the Director of the National In-  
4 stitute of Standards and Technology, submit to the Com-  
5 mittee on Commerce, Science, and Transportation of the  
6 Senate, the Subcommittee on Commerce, Justice, Science,  
7 and Related Agencies of the Committee on Appropriations  
8 of the Senate, the Committee on Science, Space, and  
9 Technology of the House of Representatives, and the Sub-  
10 committee on Commerce, Justice, Science, and Related  
11 Agencies of the Committee on Appropriations of the  
12 House of Representatives, a report containing—

13           (1) the progress of research on privacy enhanc-  
14           ing technologies;

15           (2) the progress of the development of vol-  
16           untary resources described under section 5(b)(2);  
17           and

18           (3) any policy recommendations of the Direc-  
19           tors that could facilitate and improve communication  
20           and coordination between the private sector, the Na-  
21           tional Science Foundation, and relevant Federal  
22           agencies through the implementation of privacy en-  
23           hancing technologies.

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