

117TH CONGRESS  
1ST SESSION

# S. 1353

To promote United States values and fulfill agency missions through the use of innovative applied artificial intelligence technologies, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

APRIL 22, 2021

Mr. PETERS introduced the following bill; which was read twice and referred to the Committee on Homeland Security and Governmental Affairs

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## A BILL

To promote United States values and fulfill agency missions through the use of innovative applied artificial intelligence technologies, 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 “Advancing American  
5 AI Act”.

**6 SEC. 2. PURPOSE.**

7       The purposes of this bill are to—

8              (1) promote adoption of modernized business  
9 practices and advanced technologies across the Fed-

1       eral Government that align with the values of the  
2       United States, including the protection of privacy,  
3       civil rights, and civil liberties;

4                 (2) encourage agency artificial intelligence-re-  
5       lated programs and initiatives that enhance the com-  
6       petitiveness of the United States and foster an ap-  
7       proach to artificial intelligence that builds on the  
8       strengths of the United States in innovation and  
9       entrepreneurialism;

10                (3) enhance Government venues to translate re-  
11       search advances into artificial intelligence applica-  
12       tions to modernize systems and assist agency leaders  
13       in fulfilling their missions;

14                (4) test applied artificial intelligence to drive  
15       agency productivity efficiencies in predictive supply  
16       chain and logistics; and

17                (5) test applied artificial intelligence to accel-  
18       erate investment return for agencies, such as for  
19       portfolio management, workforce development and  
20       upskilling, and for other purposes.

21 **SEC. 3. DEFINITIONS.**

22       In this Act:

23               (1) AGENCY.—The term “agency” has the  
24       meaning given the term in section 3502 of title 44,  
25       United States Code.

(3) ARTIFICIAL INTELLIGENCE.—The term “artificial intelligence” has the meaning given the term in section 238(g) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (10 U.S.C. 2358 note).

13                             (4) DIRECTOR.—The term “Director” means  
14                             the Director of the Office of Management and Budg-  
15                             et.

## **16 SEC. 4. PRINCIPLES AND POLICIES FOR USE OF ARTIFICIAL 17 INTELLIGENCE IN GOVERNMENT.**

18 (a) CONTINUAL REVIEW.—

19 (1) IN GENERAL.—The Director shall—

(A) establish mechanisms to continually refine the guidance issued to the head of each agency under section 104(a) of the AI in Government Act of 2020 (title I of division U of Public Law 116–260) as best practices evolve; and

(B) not later than 180 days after the date of enactment of this Act and every year thereafter, brief the appropriate congressional committees on the mechanisms established under subparagraph (A).

11 (B) other governmental and nongovern-  
12 mental privacy, civil rights, and civil liberties  
13 experts; and

(C) and any other individual or entity the  
Director determines to be appropriate.

**20        "(d) UPDATES.—The Director shall—**

21               “(1) continually issue updates to the memo-  
22               randum required under subsection (a); and

23               “(2) in any event, issue updates to the memo-  
24               randum required under subsection (a)—

1               “(A) not later than 2 years after the date  
2               on which the Director issues the memorandum;  
3               and

4               “(B) not less frequently than annually  
5               thereafter for 10 years.”.

6       (b) LEGAL AND APPROVAL PROCESSES FOR PRO-  
7 CUREMENT AND USE OF AI-ENABLED SYSTEMS.—Not  
8 later than 180 days after the date of enactment of this  
9 Act—

10              (1) the Secretary of Homeland Security, with  
11              the participation of the Chief Privacy Officer and  
12              the Officer for Civil Rights and Civil Liberties of the  
13              Department of Homeland Security, shall revise the  
14              legal and approval processes for the procurement  
15              and use of artificial intelligence-enabled systems, in-  
16              cluding associated data of machine learning systems,  
17              to ensure that full consideration is given to the pri-  
18              vacy, civil rights, and civil liberties impacts of artifi-  
19              cial intelligence-enabled systems; and

20              (2) the Chief Privacy Officer and the Officer  
21              for Civil Rights and Civil Liberties of the Depart-  
22              ment of Homeland Security shall report to Congress  
23              on any additional staffing or funding resources that  
24              may be required to carry out the requirements of  
25              this subsection.

1       (c) INSPECTOR GENERAL.—Not later than 180 days  
2 after the date of enactment of this Act, the Inspector Gen-  
3 eral of the Department of Homeland Security shall iden-  
4 tify any training needed to enable employees of the Office  
5 of the Inspector General to continually advance their un-  
6 derstanding of—

7                   (1) rapidly evolving artificial intelligence tech-  
8 nologies;

9                   (2) best practices for governance, oversight, and  
10 audits of the use of those technologies; and

11                   (3) how the Office of the Inspector General is  
12 using artificial intelligence to enhance audit and in-  
13 vestigative capabilities, including actions to—

14                   (A) ensure the integrity of audit and inves-  
15 tigative results; and

16                   (B) guard against bias in the selection and  
17 conduct of audits and investigations.

18       (d) ARTIFICIAL INTELLIGENCE HYGIENE AND PRO-  
19 TECTION OF PRIVACY AND GOVERNMENT INFORMA-  
20 TION.—

21                   (1) ESTABLISHMENT.—Not later than 1 year  
22 after the date of enactment of this Act, the Adminis-  
23 trator of the Office of Federal Procurement Policy  
24 and the Chief Acquisition Officers Council (in this

1 subsection referred to as the “Council”) or working  
2 group thereof shall develop a process to—

3 (A) ensure that contracts involving artifi-  
4 cial intelligence—

5 (i) align with the guidance issued to  
6 the head of each agency under section  
7 104(a) of the AI in Government Act of  
8 2020 (title I of division U of Public Law  
9 116–260);

10 (ii) address protection of privacy; and  
11 (iii) the ownership and security of  
12 data and other information obtained, proc-  
13 essed, stored, transmitted, or otherwise  
14 handled by a contractor or subcontractor;  
15 and

16 (B) address any other issue or concern de-  
17 termined to be relevant by the Administrator of  
18 the Office of Federal Procurement Policy and  
19 the Council to ensure appropriate use and pro-  
20 tection of privacy and Government data and  
21 other information.

22 (2) REVIEW.—Not later than 2 years after the  
23 date of enactment of this Act and every 2 years  
24 thereafter, the Council shall update the process de-  
25 veloped under paragraph (1).

(3) BRIEFING.—The Council shall brief the appropriate congressional committees—

(B) annually thereafter on the implementation of the process developed under paragraph (1).

14 SEC. 5. AGENCY INVENTORY AND ARTIFICIAL INTEL-  
15 LIGENCE USE CASES.

16 (a) IN GENERAL.—Not later than 180 days after the  
17 date of enactment of this Act, the Director, in consultation  
18 with the Federal Chief Information Officer and the Chief  
19 Information Officers Council, shall issue a memorandum  
20 to the head of each agency that shall articulate the method  
21 by which the agency shall make public information about  
22 the use of artificial intelligence by the agency, including  
23 the publication criteria, publication format, and method  
24 of publication.

1       (b) INVENTORY.—Not later than 1 year after the  
2 date of enactment of this Act, and annually thereafter for  
3 a period of 10 years, the head of each agency shall—

4           (1) prepare an inventory of the artificial intel-  
5 ligence use cases of the agency, including current  
6 and planned uses, consistent with the memorandum  
7 issued under subsection (a);

8           (2) identify, review, and assess existing artifi-  
9 cial intelligence deployed and operating in support of  
10 agency missions for any inconsistencies with the  
11 guidance issued under section 104 of the AI in Gov-  
12 ernment Act of 2020 (title I of division U of Public  
13 Law 116–260) and any additional guidance issued  
14 by the Director;

15           (3) develop and implement plans to achieve con-  
16 sistency with the guidance issued under section 104  
17 of the AI in Government Act of 2020 (title I of divi-  
18 sion U of Public Law 116–260) and any additional  
19 guidance from the Director for each AI application  
20 or to retire AI applications found to be developed or  
21 used in a manner that is not consistent with guid-  
22 ance issued by the Director;

23           (4) share agency inventories with other agen-  
24 cies, to the extent practicable and consistent with  
25 applicable law and policy, including those concerning

1 protection of privacy and of sensitive law enforcement,  
2 national security, and other protected information; and  
3

4 (5) make agency inventories available to the  
5 public, in a manner determined by the Director, and  
6 to the extent practicable and in accordance with applicable  
7 law and policy, including those concerning  
8 the protection of privacy and of sensitive law enforcement,  
9 national security, and other protected information.

10  
11 (c) SHARING.—The sharing of agency inventories de-  
12 scribed in subsection (b)(4) may be coordinated through  
13 the Chief Information Officers Council, the Chief Data Of-  
14 ficers Council, the Chief Financial Officers Council, the  
15 Chief Acquisition Officers Council, or other interagency  
16 bodies to improve interagency coordination and informa-  
17 tion sharing for common use cases.

18 (d) CENTRAL INVENTORY.—The Director shall des-  
19 ignate a host entity and ensure the creation and mainte-  
20 nance of an online public directory in order to—

21 (1) make agency artificial intelligence use case  
22 information available to the public and those wishing  
23 to do business with the Government; and  
24 (2) identify common use cases across agencies.

1   **SEC. 6. RAPID PILOT, DEPLOYMENT, AND SCALE OF AP-**  
2                   **PLIED ARTIFICIAL INTELLIGENCE CAPABILI-**  
3                   **TIES TO DEMONSTRATE MODERNIZATION AC-**  
4                   **TIVITIES RELATED TO USE CASES.**

5       (a) IDENTIFICATION OF USE CASES.—Not later than  
6   270 days after the date of enactment of this Act, the Di-  
7   rector shall identify not fewer than 5 new use cases for  
8   the application of cross-enterprise artificial intelligence-en-  
9   abled systems to support modernization initiatives across  
10   agencies, including interagency or intra-agency initiatives  
11   that require linking multiple siloed internal and external  
12   data sources.

13     (b) PILOT PROGRAM.—

14           (1) PURPOSES.—The purposes of the pilot pro-  
15   gram under this section are—

16                  (A) to enable agencies to operate cross-en-  
17   terprise, coordinating between existing estab-  
18   lished programs and silos to improve delivery of  
19   the agency mission; and

20                  (B) to demonstrate the circumstances  
21   under which artificial intelligence can be used  
22   to modernize or assist in modernizing legacy  
23   agency systems.

24           (2) DEPLOYMENT AND PILOT.—Not later than  
25   1 year after the date of enactment of this Act, the  
26   Director, in coordination with the heads of relevant

1       agencies and other officials as the Director deter-  
2       mines to be appropriate, shall ensure the initiation  
3       of the piloting of 5 new cross-enterprise technology  
4       use case applications that leverage commercially  
5       available technologies and systems to demonstrate  
6       scalable artificial intelligence-enabled capabilities to  
7       support the use cases identified under subsection  
8       (a).

9                 (3) PRIORITIZATION.—In carrying out para-  
10          graph (2), the Director shall prioritize modernization  
11          projects that would benefit from commercially avail-  
12          able privacy-preserving machine learning and artifi-  
13          cial intelligence techniques, such as use of differen-  
14          tial privacy, federated learning, and secure  
15          multiparty computing.

16                 (4) USE CASE MODERNIZATION APPLICATION  
17          AREAS.—Use case modernization application areas  
18          described in paragraph (2) shall include not fewer  
19          than 1 from each of the following categories:

20                     (A) Applied artificial intelligence to drive  
21                  agency productivity efficiencies in predictive  
22                  supply chain and logistics, such as—  
23                             (i) predictive food demand and opti-  
24                  mized supply;

(iii) predictive logistics to accelerate disaster recovery.

(B) Applied artificial intelligence to accelerate agency investment return and address mission-oriented challenges, such as—

9 (i) applied artificial intelligence port-  
10 folio management for agencies;

11 (ii) workforce development and  
12 upskilling;

13 (iii) redundant and laborious analyses;  
14 (iv) determining compliance with Gov-

15                   ernment requirements, such as with grants  
16                   management; or

17 (v) outcomes measurement to measure  
18 economic and social benefits.

19                         (5) REQUIREMENTS.—Not later than 3 years  
20                         after the date of enactment of this Act, the Director,  
21                         in coordination with the heads of relevant agencies  
22                         and other officials as the Director determines to be  
23                         appropriate, shall establish an artificial intelligence  
24                         capability that—

- 1                             (A) solves data access and usability issues  
2                             with automated technology and eliminate or  
3                             minimize the need for manual data cleansing  
4                             and harmonization efforts;
- 5                             (B) continuously and automatically ingests  
6                             data and updates domain models in near real-  
7                             time to help identify new patterns and predict  
8                             trends to help agency personnel to make better  
9                             decisions and take faster actions;
- 10                            (C) organizes data for meaningful data vis-  
11                             ualization and analysis so the Government has  
12                             predictive transparency for situational aware-  
13                             ness to improve use case outcomes;
- 14                            (D) is rapidly configurable to support mul-  
15                             tiple applications and automatically adapts to  
16                             dynamic conditions and evolving use case re-  
17                             quirements;
- 18                            (E) enables knowledge transfer and col-  
19                             laboration across agencies; and
- 20                            (F) preserves intellectual property rights to  
21                             the data and output for benefit of the Federal  
22                             Government and agencies.

23                            (6) TECHNOLOGY MODERNIZATION FUND.—

24                            (A) IN GENERAL.—The activities required  
25                             under this section shall be an allowable use

1           under the Technology Modernization Fund es-  
2         tablished under section 1078 of the National  
3         Defense Authorization Act for Fiscal Year 2018  
4         (40 U.S.C. 11301 note) (in this paragraph re-  
5         ferred to as the “Fund”).

6           (B) PRIORITIZATION.—The Director may  
7         prioritize the activities in this section for imple-  
8         mentation and funding by the Fund, in which  
9         case the Director is encouraged to take steps to  
10        ensure that agencies are able to rapidly and ef-  
11        fективly implement the pilots under this sub-  
12        section, including by removing reimbursement  
13        requirements for funding from the Fund.

14           (c) BRIEFING.—Not earlier than 270 days but not  
15        later than 1 year after the date of enactment of this Act,  
16        and annually thereafter for 3 years, the Director shall  
17        brief the appropriate congressional committees on the ac-  
18        tivities carried out under this section and results of those  
19        activities.

20 **SEC. 7. ENABLING ENTREPRENEURS AND VALUES.**

21           (a) INNOVATIVE COMMERCIAL ITEMS.—Section 880  
22        of the National Defense Authorization Act for Fiscal Year  
23        2017 (41 U.S.C. 3301 note) is amended—

24                  (1) in subsection (c), by striking \$10,000,000”  
25        and inserting “\$25,000,000”; and

1                             (2) by amending subsection (f) to read as fol-  
2                             lows:

3                         “(f) DEFINITIONS.—In this section—

4                         “(1) the term ‘commercial product’ has the  
5                         meaning given the term ‘commercial item’ in section  
6                         2.101 of the Federal Acquisition Regulation; and

7                         “(2) the term ‘innovative’ means—

8                         “(A) any new technology, process, or meth-  
9                         od, including research and development; or

10                         “(B) any new application of an existing  
11                         technology, process, or method.”; and

12                         (3) in subsection (g), by striking “2022” and  
13                         insert “2027”.

14                         (b) DHS OTHER TRANSACTION AUTHORITY.—Sec-  
15                         tion 831 of the Homeland Security Act of 2002 (6 U.S.C.  
16                         391) is amended—

17                         (1) in subsection (a)—

18                         (A) in the matter preceding paragraph (1),  
19                         by striking “September 30, 2017” and inserting  
20                         “September 30, 2024”; and

21                         (B) by amending paragraph (2) to read as  
22                         follows:

23                         “(2) PROTOTYPE PROJECTS.—The Secretary—

24                         “(A) may, under the authority of para-  
25                         graph (1), carry out prototype projects under

1           section 2371b of title 10, United States Code;

2           and

3           “(B) in applying the authorities of such  
4           section 2371b, the Secretary shall perform the  
5           functions of the Secretary of Defense as pre-  
6           scribed in such section.”;

7           (2) in subsection (c)(1), by striking “September  
8           30, 2017” and inserting “September 30, 2024”; and

9           (3) in subsection (d), by striking “section  
10          845(e)” and all that follows and inserting “section  
11          2371b(e) of title 10, United States Code.”.

12 **SEC. 8. AUTHORIZATION OF APPROPRIATIONS.**

13          There is authorized to be appropriated such sums as  
14          the necessary to carry out the requirements of this Act  
15          and the amendments made by this Act.

○