

AMENDMENT NO. _____ Calendar No. _____

Purpose: In the nature of a substitute.

IN THE SENATE OF THE UNITED STATES—117th Cong., 1st Sess.

S. 1353

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

Referred to the Committee on _____ and
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended
to be proposed by Mr. PETERS

Viz:

1 Strike all after the enacting clause and insert the fol-

2 lowing:

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) encourage agency artificial intelligence-re-

9 lated programs and initiatives that enhance the com-

10 petitiveness of the United States and foster an ap-

11 proach to artificial intelligence that builds on the

1 strengths of the United States in innovation and
2 entrepreneurialism;

3 (2) enhance the ability of the Federal Govern-
4 ment to translate research advances into artificial
5 intelligence applications to modernize systems and
6 assist agency leaders in fulfilling their missions;

7 (3) promote adoption of modernized business
8 practices and advanced technologies across the Fed-
9 eral Government that align with the values of the
10 United States, including the protection of privacy,
11 civil rights, and civil liberties; and

12 (4) test and harness applied artificial intel-
13 ligence to enhance mission effectiveness and business
14 practice efficiency.

15 **SEC. 3. DEFINITIONS.**

16 In this Act:

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

20 (2) APPROPRIATE CONGRESSIONAL COMMIT-
21 TEES.—The term “appropriate congressional com-
22 mittees” means—

23 (A) the Committee on Homeland Security
24 and Governmental Affairs of the Senate; and

1 (B) the Committee on Oversight and Re-
2 form of the House of Representatives.

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

8 (4) ARTIFICIAL INTELLIGENCE SYSTEM.—The
9 term “artificial intelligence system”—

10 (A) means any data system, software, ap-
11 plication, tool, or utility that operates in whole
12 or in part using dynamic or static machine
13 learning algorithms or other forms of artificial
14 intelligence, whether—

15 (i) the data system, software, applica-
16 tion, tool, or utility is established primarily
17 for the purpose of researching, developing,
18 or implementing artificial intelligence tech-
19 nology; or

20 (ii) artificial intelligence capability is
21 integrated into another system or agency
22 business process, operational activity, or
23 technology system; and

24 (B) does not include any common commer-
25 cial product within which artificial intelligence

1 is embedded, such as a word processor or map
2 navigation system.

3 (C)

4 (5) DEPARTMENT.—The term “Department”
5 means the Department of Homeland Security.

6 (6) DIRECTOR.—The term “Director” means
7 the Director of the Office of Management and Budg-
8 et.

9 **SEC. 4. PRINCIPLES AND POLICIES FOR USE OF ARTIFICIAL**
10 **INTELLIGENCE IN GOVERNMENT.**

11 (a) GUIDANCE.—The Director shall, when developing
12 the guidance required under section 104(a) of the AI in
13 Government Act of 2020 (title I of division U of Public
14 Law 116–260), consider—

15 (1) the considerations and recommended prac-
16 tices identified by the National Security Commission
17 on Artificial Intelligence in the report entitled “Key
18 Considerations for the Responsible Development and
19 Fielding of AI”, as updated in April 2021;

20 (2) the principles articulated in Executive
21 Order 13960 (85 Fed. Reg. 78939; relating to pro-
22 moting the use of trustworthy artificial intelligence
23 in Government); and

24 (3) the input of—

1 (A) the Privacy and Civil Liberties Over-
2 sight Board;

3 (B) relevant interagency councils, such as
4 the Federal Privacy Council, the Chief Informa-
5 tion Officers Council, and the Chief Data Offi-
6 cers Council;

7 (C) other governmental and nongovern-
8 mental privacy, civil rights, and civil liberties
9 experts; and

10 (D) any other individual or entity the Di-
11 rector determines to be appropriate.

12 (b) DEPARTMENT POLICIES AND PROCESSES FOR
13 PROCUREMENT AND USE OF ARTIFICIAL INTELLIGENCE-
14 ENABLED SYSTEMS.—Not later than 180 days after the
15 date of enactment of this Act—

16 (1) the Secretary of Homeland Security, with
17 the participation of the Chief Procurement Officer,
18 the Chief Information Officer, the Chief Privacy Of-
19 ficer, and the Officer for Civil Rights and Civil Lib-
20 erties of the Department and any other person de-
21 termined to be relevant by the Secretary of Home-
22 land Security, shall issue policies and procedures for
23 the Department related to—

24 (A) the acquisition and use of artificial in-
25 telligence; and

1 (B) considerations for the risks and im-
2 pacts related to artificial intelligence-enabled
3 systems, including associated data of machine
4 learning systems, to ensure that full consider-
5 ation is given to—

6 (i) the privacy, civil rights, and civil
7 liberties impacts of artificial intelligence-
8 enabled systems; and

9 (ii) security against misuse, degrada-
10 tion, or rendering inoperable of artificial in-
11 telligence-enabled systems; and

12 (2) the Chief Privacy Officer and the Officer
13 for Civil Rights and Civil Liberties of the Depart-
14 ment shall report to Congress on any additional
15 staffing or funding resources that may be required
16 to carry out the requirements of this subsection.

17 (c) INSPECTOR GENERAL.—Not later than 180 days
18 after the date of enactment of this Act, the Inspector Gen-
19 eral of the Department shall identify any training and in-
20 vestments needed to enable employees of the Office of the
21 Inspector General to continually advance their under-
22 standing of—

23 (1) artificial intelligence systems;

1 2020 (title I of division U of Public Law
2 116–260);

3 (ii) address protection of privacy, civil
4 rights, and civil liberties;

5 (iii) address the ownership and secu-
6 rity of data and other information created,
7 used, processed, stored, maintained, dis-
8 seminated, disclosed, or disposed of by a
9 contractor or subcontractor on behalf of
10 the Federal Government; and

11 (iv) include considerations for secur-
12 ing the training data, algorithms, and
13 other components of any artificial intel-
14 ligence system against misuse, unauthor-
15 ized alteration, degradation, or rendering
16 inoperable; and

17 (B) address any other issue or concern de-
18 termined to be relevant by the Director to en-
19 sure appropriate use and protection of privacy
20 and Government data and other information.

21 (2) CONSULTATION.—In developing the consid-
22 erations under paragraph (1)(A)(iv), the Director
23 shall consult with the Secretary of Homeland Secu-
24 rity, the Director of the National Institute of Stand-

1 ards and Technology, and the Director of National
2 Intelligence.

3 (3) REVIEW.—The Director—

4 (A) should continuously update the means
5 developed under paragraph (1); and

6 (B) not later than 2 years after the date
7 of enactment of this Act and not less frequently
8 than every 2 years thereafter, shall update the
9 means developed under paragraph (1).

10 (4) BRIEFING.—The Director shall brief the ap-
11 propriate congressional committees—

12 (A) not later than 90 days after the date
13 of enactment of this Act and thereafter on a
14 quarterly basis until the Director first imple-
15 ments the means developed under paragraph
16 (1); and

17 (B) annually thereafter on the implementa-
18 tion of this subsection.

19 (5) SUNSET.—This subsection shall cease to be
20 effective on the date that is 5 years after the date
21 of enactment of this Act.

22 **SEC. 5. AGENCY INVENTORIES AND ARTIFICIAL INTEL-**
23 **LIGENCE USE CASES.**

24 (a) INVENTORY.—Not later than 60 days after the
25 date of enactment of this Act, and continuously thereafter

1 for a period of 5 years, the Director, in consultation with
2 the Chief Information Officers Council, the Chief Data Of-
3 ficers Council, and other interagency bodies as determined
4 to be appropriate by the Director, shall require the head
5 of each agency to—

6 (1) prepare and maintain an inventory of the
7 artificial intelligence use cases of the agency, includ-
8 ing current and planned uses;

9 (2) share agency inventories with other agen-
10 cies, to the extent practicable and consistent with
11 applicable law and policy, including those concerning
12 protection of privacy and of sensitive law enforce-
13 ment, national security, and other protected infor-
14 mation; and

15 (3) make agency inventories available to the
16 public, in a manner determined by the Director, and
17 to the extent practicable and in accordance with ap-
18 plicable law and policy, including those concerning
19 the protection of privacy and of sensitive law en-
20 forcement, national security, and other protected in-
21 formation.

22 (b) CENTRAL INVENTORY.—The Director is encour-
23 aged to designate a host entity and ensure the creation
24 and maintenance of an online public directory to—

1 (1) make agency artificial intelligence use case
2 information available to the public and those wishing
3 to do business with the Federal Government; and

4 (2) identify common use cases across agencies.

5 (c) SHARING.—The sharing of agency inventories de-
6 scribed in subsection (a)(2) may be coordinated through
7 the Chief Information Officers Council, the Chief Data Of-
8 ficers Council, the Chief Financial Officers Council, the
9 Chief Acquisition Officers Council, or other interagency
10 bodies to improve interagency coordination and informa-
11 tion sharing for common use cases.

12 **SEC. 6. RAPID PILOT, DEPLOYMENT AND SCALE OF AP-**
13 **PLIED ARTIFICIAL INTELLIGENCE CAPABILI-**
14 **TIES TO DEMONSTRATE MODERNIZATION AC-**
15 **TIVITIES RELATED TO USE CASES.**

16 (a) IDENTIFICATION OF USE CASES.—Not later than
17 270 days after the date of enactment of this Act, the Di-
18 rector, in consultation with the Chief Information Officers
19 Council, the Chief Data Officers Council, and other inter-
20 agency bodies as determined to be appropriate by the Di-
21 rector, shall identify 4 new use cases for the application
22 of artificial intelligence-enabled systems to support inter-
23 agency or intra-agency modernization initiatives that re-
24 quire linking multiple siloed internal and external data
25 sources, consistent with applicable laws and policies, in-

1 cluding those relating to the protection of privacy and of
2 sensitive law enforcement, national security, and other
3 protected information.

4 (b) PILOT PROGRAM.—

5 (1) PURPOSES.—The purposes of the pilot pro-
6 gram under this subsection include—

7 (A) to enable agencies to operate across or-
8 ganizational boundaries, coordinating between
9 existing established programs and silos to im-
10 prove delivery of the agency mission; and

11 (B) to demonstrate the circumstances
12 under which artificial intelligence can be used
13 to modernize or assist in modernizing legacy
14 agency systems.

15 (2) DEPLOYMENT AND PILOT.—Not later than
16 1 year after the date of enactment of this Act, the
17 Director, in coordination with the heads of relevant
18 agencies and other officials as the Director deter-
19 mines to be appropriate, shall ensure the initiation
20 of the piloting of the 4 new artificial intelligence use
21 case applications identified under subsection (a),
22 leveraging commercially available technologies and
23 systems to demonstrate scalable artificial intel-
24 ligence-enabled capabilities to support the use cases
25 identified under subsection (a).

1 (3) RISK EVALUATION AND MITIGATION
2 PLAN.—In carrying out paragraph (2), the Director
3 shall require the heads of agencies to—

4 (A) evaluate risks in utilizing artificial in-
5 telligence systems; and

6 (B) develop a risk mitigation plan to ad-
7 dress those risks, including consideration of—

8 (i) the artificial intelligence system
9 not performing as expected;

10 (ii) the lack of sufficient or quality
11 training data; and

12 (iii) the vulnerability of a utilized arti-
13 ficial intelligence system to unauthorized
14 manipulation or misuse.

15 (4) PRIORITIZATION.—In carrying out para-
16 graph (2), the Director shall prioritize modernization
17 projects that—

18 (A) would benefit from commercially avail-
19 able privacy-preserving techniques, such as use
20 of differential privacy, federated learning, and
21 secure multiparty computing; and

22 (B) otherwise take into account consider-
23 ations of civil rights and civil liberties.

24 (5) USE CASE MODERNIZATION APPLICATION
25 AREAS.—Use case modernization application areas

1 described in paragraph (2) shall include not less
2 than 1 from each of the following categories:

3 (A) Applied artificial intelligence to drive
4 agency productivity efficiencies in predictive
5 supply chain and logistics, such as—

6 (i) predictive food demand and opti-
7 mized supply;

8 (ii) predictive medical supplies and
9 equipment demand and optimized supply;

10 or

11 (iii) predictive logistics to accelerate
12 disaster preparedness, response, and recov-
13 ery.

14 (B) Applied artificial intelligence to accel-
15 erate agency investment return and address
16 mission-oriented challenges, such as—

17 (i) applied artificial intelligence port-
18 folio management for agencies;

19 (ii) workforce development and
20 upskilling;

21 (iii) redundant and laborious analyses;

22 (iv) determining compliance with Gov-
23 ernment requirements, such as with grants
24 management; or

1 (v) outcomes measurement to measure
2 economic and social benefits.

3 (6) REQUIREMENTS.—Not later than 3 years
4 after the date of enactment of this Act, the Director,
5 in coordination with the heads of relevant agencies
6 and other officials as the Director determines to be
7 appropriate, shall establish an artificial intelligence
8 capability within each of the 4 use case pilots under
9 this subsection that—

10 (A) solves data access and usability issues
11 with automated technology and eliminates or
12 minimizes the need for manual data cleansing
13 and harmonization efforts;

14 (B) continuously and automatically ingests
15 data and updates domain models in near real-
16 time to help identify new patterns and predict
17 trends, to the extent possible, to help agency
18 personnel to make better decisions and take
19 faster actions;

20 (C) organizes data for meaningful data vis-
21 ualization and analysis so the Government has
22 predictive transparency for situational aware-
23 ness to improve use case outcomes;

24 (D) is rapidly configurable to support mul-
25 tiple applications and automatically adapts to

1 dynamic conditions and evolving use case re-
2 quirements, to the extent possible

3 (E) enables knowledge transfer and col-
4 laboration across agencies; and

5 (F) preserves intellectual property rights to
6 the data and output for benefit of the Federal
7 Government and agencies.

8 (c) BRIEFING.—Not earlier than 270 days but not
9 later than 1 year after the date of enactment of this Act,
10 and annually thereafter for 4 years, the Director shall
11 brief the appropriate congressional committees on the ac-
12 tivities carried out under this section and results of those
13 activities.

14 (d) SUNSET.—The section shall cease to be effective
15 on the date that is 5 years after the date of enactment
16 of this Act.

17 **SEC. 7. ENABLING ENTREPRENEURS AND AGENCY MIS-**
18 **SIONS.**

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

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

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

1 “(f) DEFINITIONS.—In this section—

2 “(1) the term ‘commercial product’—

3 “(A) has the meaning given the term ‘com-
4 mercial item’ in section 2.101 of the Federal
5 Acquisition Regulation; and

6 “(B) includes a commercial product or a
7 commercial service, as defined in sections 103
8 and 103a, respectively, of title 41, United
9 States Code; and

10 “(2) the term ‘innovative’ means—

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

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

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

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

20 (1) in subsection (a)—

21 (A) in the matter preceding paragraph (1),
22 by striking “September 30, 2017” and inserting
23 “September 30, 2024”; and

24 (B) by amending paragraph (2) to read as
25 follows:

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

2 “(A) may, under the authority of para-
3 graph (1), carry out prototype projects under
4 section 2371b of title 10, United States Code;
5 and

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

10 (2) in subsection (c)(1), by striking “September
11 30, 2017” and inserting “September 30, 2024”; and

12 (3) in subsection (d), by striking “section
13 845(e)” and all that follows and inserting “section
14 2371b(e) of title 10, United States Code.”.

15 (c) COMMERCIAL OFF THE SHELF SUPPLY CHAIN
16 RISK MANAGEMENT TOOLS.—The General Services Ad-
17 ministration is encouraged to pilot commercial off the
18 shelf supply chain risk management tools to improve the
19 ability of the Federal Government to characterize, mon-
20 itor, predict, and respond to specific supply chain threats
21 and vulnerabilities that could inhibit future Federal acqui-
22 sition operations.