115TH CONGRESS
2D SESSION

S. _____

To establish the National Security Commission on Artificial Intelligence, and for other purposes.

_____

IN THE SENATE OF THE UNITED STATES

_____

Mrs. ERNST (for herself and Ms. CORTEZ MASTO) introduced the following bill; which was read twice and referred to the Committee on

_____

_____

A BILL

To establish the National Security Commission on Artificial Intelligence, 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 ''National Security

5   Commission on Artificial Intelligence Act of 2018''.

6   **SEC. 2. NATIONAL SECURITY COMMISSION ON ARTIFICIAL**

7   **INTELLIGENCE.**

8   (a) DEFINITIONS.—In this section:

9   (1) ARTIFICIAL INTELLIGENCE.—The term ''ar-

10   tificial intelligence'' includes each of the following:

1 (A) Any artificial system that performs
2 tasks under varying and unpredictable cir-
3 cumstances without significant human over-
4 sight, or that can learn from experience and im-
5 prove performance when exposed to data sets.

6 (B) An artificial system developed in com-
7 puter software, physical hardware, or other con-
8 text that solves tasks requiring human-like per-
9 ception, cognition, planning, learning, commu-
10 nication, or physical action.

11 (C) An artificial system designed to think
12 or act like a human, including cognitive archi-
13 tectures and neural networks.

14 (D) A set of techniques, including machine
15 learning, that is designed to approximate a cog-
16 nitive task.

17 (E) An artificial system designed to act ra-
18 tionally, including an intelligent software agent
19 or embodied robot that achieves goals using
20 perception, planning, reasoning, learning, com-
21 municating, decision making, and acting.

22 (2) COMMISSION.—The term "Commission"
23 means the National Security Commission on Artifi-
24 cial Intelligence established under subsection (b)(1).

25 (b) ESTABLISHMENT.—

1   (1) IN GENERAL.—There is established in the
2 executive branch an independent commission to re-
3 view advances in artificial intelligence, related ma-
4 chine learning developments, and associated tech-
5 nologies.

6   (2) TREATMENT.—The Commission shall be
7 considered an independent establishment (as defined
8 in section 104 of title 5, United States Code) and
9 a temporary organization (as defined in section
10 3161(a) of such title).

11   (3) DESIGNATION.—The commission estab-
12 lished under paragraph (1) shall be known as the
13 "National Security Commission on Artificial Intel-
14 ligence".

15   (4) MEMBERSHIP.—

16   (A) COMPOSITION.—The Commission shall
17   be composed of 15 members appointed as fol-
18   lows:

19   (i) The Secretary of Commerce shall
20   appoint 1 member.

21   (ii) The Secretary of Defense shall ap-
22   point 2 members.

23   (iii) The Chairman of the Committee
24   on Commerce, Science, and Transportation
25   of the Senate shall appoint 1 member.

4

1   (iv) The Ranking Member of the

2   Committee on Commerce, Science, and

3   Transportation of the Senate shall appoint

4   1 member.

5   (v) The Chairman of the Committee

6   on Energy and Commerce of the House of

7   Representatives shall appoint 1 member.

8   (vi) The Ranking Member of the

9   Committee on Energy and Commerce of

10   the House of Representatives shall appoint

11   1 member.

12   (vii) The Chairman of the Committee

13   on Armed Services of the Senate shall ap-

14   point 1 member.

15   (viii) The ranking minority member of

16   the Committee on Armed Services of the

17   Senate shall appoint 1 member.

18   (ix) The Chairman of the Committee

19   on Armed Services of the House of Rep-

20   resentatives shall appoint 1 member.

21   (x) The ranking minority member of

22   the Committee on Armed Services of the

23   House of Representatives shall appoint 1

24   member.

1   (xi) The Chairman of the Select Com-

2   mittee on Intelligence of the Senate shall

3   appoint 1 member.

4   (xii) The Vice Chairman of the Select

5   Committee on Intelligence of the Senate

6   shall appoint 1 member.

7   (xiii) The Chairman of the Permanent

8   Select Committee on Intelligence of the

9   House of Representatives shall appoint 1

10   member.

11   (xiv) The ranking member of the Per-

12   manent Select Committee on Intelligence

13   of the House of representatives shall ap-

14   point 1 member.

15   (B) DEADLINE FOR APPOINTMENT.—Mem-

16 bers shall be appointed to the Commission

17 under paragraph (1) not later than 90 days

18 after the date of the enactment of this Act.

19   (C) EFFECT OF LACK OF APPOINTMENT

20 BY APPOINTMENT DATE.—If one or more ap-

21 pointments under paragraph (1) is not made by

22 the date specified in paragraph (2), the author-

23 ity to make such appointment or appointments

24 shall expire, and the number of members of the

25 Commission shall be reduced by the number

1   equal to the number of appointments so not

2   made.

3   (5) CHAIR AND VICE CHAIR.—The Commission

4   shall elect a Chair and Vice Chair from among its

5   members, one of whom shall be a national security

6   practitioner or academic and one of whom shall be

7   an economist or expert in the United States econ-

8   omy.

9   (6) TERMS.—Members shall be appointed for

10   the life of the Commission. A vacancy in the Com-

11   mission shall not affect its powers and shall be filled

12   in the same manner as the original appointment was

13   made.

14   (7) STATUS AS FEDERAL EMPLOYEES.—Not-

15   withstanding the requirements of section 2105 of

16   title 5, United States Code, including the required

17   supervision under subsection (a)(3) of such section,

18   the members of the Commission shall be deemed to

19   be Federal employees.

20   (c) DUTIES.—

21   (1) IN GENERAL.—The Commission shall carry

22   out the review described in subsection (b)(1). In car-

23   rying out such review, the Commission shall consider

24   the methods and means necessary to advance the de-

25   velopment of artificial intelligence, machine learning,

1   and associated technologies by the United States to

2   comprehensively address the national and economic

3   security needs of the United States, including eco-

4   nomic risk, and any other associated issues.

5   (2) SCOPE OF THE REVIEW.—In conducting the

6   review under paragraph (1), the Commission shall

7   consider the following:

8   (A) The competitiveness of the United

9   States in artificial intelligence, machine learn-

10   ing, and other associated technologies, including

11   matters relating to national security, economic

12   security, public-private partnerships, and invest-

13   ments.

14   (B) Means and methods for the United

15   States to maintain a technological advantage in

16   artificial intelligence, machine learning, and

17   other associated technologies, including quan-

18   tum computing and high performance com-

19   puting.

20   (C) Developments and trends in inter-

21   national cooperation and competitiveness, in-

22   cluding foreign investments in artificial intel-

23   ligence, machine learning, and computer science

24   fields.

1   (D) Means by which to foster greater em-
2   phasis and investments in basic and advanced
3   research to stimulate private, public, academic,
4   and combined initiatives in artificial intel-
5   ligence, machine learning, and other associated
6   technologies, including quantum computing and
7   high performance computing.

8   (E) Education effects and incentives to at-
9   tract and recruit leading talent in artificial in-
10   telligence and machine learning, including
11   science, technology, engineering, and math pro-
12   grams.

13   (F) Workforce effects, displacement of
14   workers, and the role of government or industry
15   in retraining displaced workers.

16   (G) Risks associated with United States
17   and foreign country and non-state actors ad-
18   vances in military employment of artificial intel-
19   ligence and machine learning, or acquisition of
20   the same, including under the international law
21   of armed conflict, international humanitarian
22   law, and escalation dynamics.

23   (H) Associated ethical considerations re-
24   lated to artificial intelligence and machine

1   learning as it will be used for future applica-

2   tions.

3   (I) Means to establish data standards and

4   provide incentives for the sharing of open train-

5   ing data within related data-driven industries.

6   (J) The opportunities or vulnerabilities of

7   intellectual property theft, copyright infringe-

8   ment concerns and risk associated with outside

9   influences, whether friendly or adversarial.

10   (K) The potential legal use by law enforce-

11   ment to address technological barriers to bring-

12   ing criminals to justice or aiding in broader

13   criminal investigations.

14   (L) Development of privacy- and security-

15   protecting measures for data, and broader cyber

16   security protections, in artificial intelligence,

17   machine learning, and associated technologies.

18   (M) Consideration of the evolution of arti-

19   ficial intelligence and appropriate mechanisms

20   for managing such technology.

21   (N) Such other matters as the Commission

22   considers relevant to the common defense or

23   economic security of the United States.

24   (d) REPORTS.—

1   (1) INITIAL REPORT.—Not later than 180 days

2   after the date of the enactment of this Act, the

3   Commission shall submit to the President and Con-

4   gress an initial report on the findings of the Com-

5   mission and such recommendations that the Com-

6   mission may have for action by the executive branch

7   and Congress related to artificial intelligence and

8   machine learning and associated technologies, in-

9   cluding recommendations to more effectively orga-

10   nize the Federal Government.

11   (2) ANNUAL COMPREHENSIVE REPORTS.—Not

12   later than one year after the date of this enactment

13   of this Act and not less frequently than once each

14   year thereafter until the date specified in subsection

15   (f), the Commission shall submit to the President

16   and to Congress a comprehensive report on the re-

17   view required under subsection (c).

18   (3) FORM OF REPORTS.—Reports submitted

19   under this subsection shall be made publically avail-

20   able, but may include a classified annex.

21   (4) DISSENTING OPINIONS.—Reports submitted

22   under this subsection shall provide the opportunity

23   for dissenting opinions from within the Commission,

24   provided for within the appendices of the public re-

25   port, and in the classified annexes as appropriate.

1   (e) FUNDING.—Of the amounts authorized to be ap-

2 propriated for fiscal year 2019 for the Department of De-

3 fense, not more than $10,000,000 shall be made available

4 to the Commission to carry out its duties under this sec-

5 tion. Funds made available to the Commission under the

6 preceding sentence shall remain available until expended.

7   (f) TERMINATION.—The Commission shall terminate

8 on October 1, 2020.