

118TH CONGRESS  
2D SESSION

# S. 5239

To require the Secretary of Defense to manage risks relating to military use of artificial intelligence, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

SEPTEMBER 25, 2024

Mr. WELCH introduced the following bill; which was read twice and referred to the Committee on Armed Services

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## A BILL

To require the Secretary of Defense to manage risks relating to military use of 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 “Artificial Intelligence  
5       Weapon Accountability and Risk Evaluation Act of 2024”  
6       or the “AWARE Act of 2024”.

7       **SEC. 2. MANAGING RISKS RELATING TO MILITARY USE OF**  
8               **ARTIFICIAL INTELLIGENCE.**

9       (a) LEDGER OF USE AND DEPLOYMENT.—

1           (1) IN GENERAL.—Not later than one year  
 2           after the date of the enactment of this Act the Sec-  
 3           retary of Defense shall commence creating, and not  
 4           later than three years after the date of the enact-  
 5           ment of this Act the Secretary shall complete cre-  
 6           ating, a ledger of all uses by the Department of De-  
 7           fense of covered systems.

8           (2) REQUIREMENTS.—The Secretary shall en-  
 9           sure that the ledger created pursuant to paragraph  
 10          (1)—

11                       (A) is a structured, indexed database; and

12                       (B) maintained and updated on a regular  
 13          basis to ensure that the ledger is accurate.

14          (b) RISK ASSESSMENT PROCESS.—

15           (1) IN GENERAL.—Not later than three years  
 16           after the date of the enactment of this Act, the Sec-  
 17           retary shall establish a risk assessment process that  
 18           holistically evaluates each unique implementation by  
 19           the Department of a covered system included in the  
 20           ledger required by subsection (a).

21           (2) ELEMENTS.—

22                       (A) IN GENERAL.—The process required  
 23           by paragraph (1) shall, at a minimum, cover  
 24           matters relating to the following:

25                               (i) Dependability.

- 1 (ii) Cybersecurity.
- 2 (iii) Privacy.
- 3 (iv) Bias.
- 4 (v) Bias towards escalation.
- 5 (vi) Deployment span.
- 6 (vii) Risk of civilian harm.

7 (B) BIAS TOWARDS ESCALATION.—For  
 8 purposes of subparagraph (A)(v), the process  
 9 shall cover the intent of the system and assess  
 10 for any bias relating to whether the technology  
 11 ever escalates or deescalates conflict situations.

12 (C) DEPLOYMENT SPAN.—For purposes of  
 13 subparagraph (A)(vi), the process shall address  
 14 changes in risk levels based on whether covered  
 15 systems are deployed singularly or in clusters or  
 16 swarms.

17 (3) ANNUAL ASSESSMENTS.—The Secretary  
 18 shall ensure that the process required by paragraph  
 19 (1) requires reevaluation of each covered system in-  
 20 cluded in the ledger required by subsection (a)—

21 (A) not less frequently than annually; and

22 (B) whenever—

23 (i) the underlying foundation artificial  
 24 intelligence model receives an update;

1 (ii) the Department procures any cov-  
2 ered system that has not previously been  
3 evaluated by the process; and

4 (iii) a new weapons review of a cov-  
5 ered system is conducted by the Depart-  
6 ment.

7 (c) ANNOTATIONS REGARDING EXPORTS.—The Sec-  
8 retary shall annotate in the ledger required by subsection  
9 (a) when—

10 (1) a covered system developed or owned by the  
11 Department is shared with a foreign country, ex-  
12 ported to a foreign country, or used by any foreign  
13 person or government; and

14 (2) such sharing, exporting, or use presents ad-  
15 ditional risk covered by the risk assessment process  
16 required by subsection (b).

17 (d) PROGRESS REPORTS TO CONGRESS.—Not later  
18 than one year after the date of the enactment of this Act  
19 and not less frequently once each year thereafter until the  
20 date that is three years after the date of the enactment  
21 of this Act, the Secretary shall submit to Congress a re-  
22 port on the progress of the Secretary in carrying out this  
23 Act.

24 (e) ANNUAL SUBMISSIONS TO CONGRESS.—

1           (1) IN GENERAL.—Not later than three years  
2           after the date of the enactment of this Act and not  
3           less frequently than once each year thereafter, the  
4           Secretary shall submit to Congress an annual sub-  
5           mission that includes the following:

6                   (A) The ledger required by subsection (a).

7                   (B) An annual report on the findings of  
8           the Secretary with respect to the risk assess-  
9           ments conducted, in the year covered by the an-  
10          nual submission, pursuant to the risk assess-  
11          ment process established under subsection (b).

12                  (C) The annotations made under sub-  
13          section (c) during the year covered by the an-  
14          nual submission.

15          (2) FORM.—Each submission under paragraph  
16          (1) shall be, to the fullest extent possible, in unclas-  
17          sified form, but may include a classified annex to the  
18          degree the Secretary considers necessary.

19          (3) PUBLIC AVAILABILITY.—The Secretary  
20          shall make available to the public the unclassified  
21          portion of each annual submission under paragraph  
22          (1).

23          (f) SENSE OF CONGRESS.—It is the sense of Con-  
24          gress that the ledger created pursuant to subsection (a)(1)  
25          will reflect strong and continuing commitment of the De-

1 partment of Defense to being a transparent global leader  
2 in establishing responsible policies regarding military uses  
3 of artificial intelligence-enabled weapons, targeting, and  
4 decision support systems.

5 (g) RULE OF CONSTRUCTION.—Nothing in this sec-  
6 tion shall be construed to reduce any existing privacy,  
7 safety, or security protections or guardrails in effect before  
8 the date of the enactment of this Act.

9 (h) DEFINITIONS.—In this section:

10 (1) The term “artificial intelligence” has the  
11 meaning given such term in section 5002 of the Na-  
12 tional Artificial Intelligence Initiative Act of 2020  
13 (15 U.S.C. 9401).

14 (2) The term “covered system” includes the fol-  
15 lowing systems that are enabled by artificial intel-  
16 ligence:

17 (A) A weapon system.

18 (B) A targeting system.

19 (C) A decision support system that aids a  
20 system described in subparagraph (A) or (B).

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