

Calendar No. 482118TH CONGRESS
2^D SESSION**S. 3849**

To promote United States leadership in technical standards by directing the National Institute of Standards and Technology and the Department of State to take certain actions to encourage and enable United States participation in developing standards and specifications for artificial intelligence and other critical and emerging technologies, and for other purposes.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 29, 2024

Mr. WARNER (for himself, Mrs. BLACKBURN, Mr. HICKENLOOPER, and Mr. YOUNG) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

AUGUST 1, 2024

Reported by Ms. CANTWELL, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italie*]

A BILL

To promote United States leadership in technical standards by directing the National Institute of Standards and Technology and the Department of State to take certain actions to encourage and enable United States participation in developing standards and specifications for artificial intelligence and other critical and emerging 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 “Promoting United
5 States Leadership in Standards Act of 2024”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

8 (1) **ARTIFICIAL INTELLIGENCE AND OTHER**
9 **CRITICAL AND EMERGING TECHNOLOGIES.**—The
10 term “artificial intelligence and other critical and
11 emerging technologies” means a subset of artificial
12 intelligence and other critical and emerging tech-
13 nologies included in the list of such technologies
14 identified and maintained by the National Science
15 and Technology Council of the Office of Science and
16 Technology Policy as the Director considers appro-
17 priate for purposes of this Act.

18 (2) **DIRECTOR.**—The term “Director” means
19 the Director of the National Institute of Standards
20 and Technology.

1 **SEC. 3. UNITED STATES PARTICIPATION IN ORGANIZA-**
2 **TIONS DEVELOPING STANDARDS AND SPECI-**
3 **FICATIONS FOR ARTIFICIAL INTELLIGENCE**
4 **AND OTHER CRITICAL AND EMERGING TECH-**
5 **NOLOGIES.**

6 (a) BRIEFING REQUIRED.—

7 (1) IN GENERAL.—Not later than 1 year after
8 the date of the enactment of this Act, the Director
9 shall provide to Congress a briefing to assist in the
10 evaluation and identification of opportunities for
11 Federal Government participation in the develop-
12 ment of technical standards for artificial intelligence
13 and other critical and emerging technologies.

14 (2) ELEMENTS.—The briefing provided pursu-
15 ant to paragraph (1) shall include the following:

16 (A) An overview of standards activities re-
17 lating to artificial intelligence and other critical
18 and emerging technologies and information
19 about the following:

20 (i) Key technical standards that are
21 the subject of ongoing activity.

22 (ii) Key standards bodies hosting
23 these activities.

24 (iii) Any Federal agency that is par-
25 ticipating in these activities.

1 (B) An analysis identifying where partici-
2 pation by United States industry and Federal
3 agencies in standards activities in artificial in-
4 telligence and other critical and emerging tech-
5 nologies would be facilitated or enhanced by
6 conducting prestandardization and standards
7 coordination meetings with stakeholders and
8 standards meetings hosted in the United States.

9 (C) Recommendations for effectively in-
10 forming United States industry and Federal
11 agencies on ongoing standardization activities
12 with the objective of increasing participation of
13 such industry and agencies in such activities.

14 (3) FEDERAL AGENCY NOTICE REQUIRE-
15 MENT.—

16 (A) IN GENERAL.—Using the mechanism
17 established pursuant to subparagraph (B), each
18 head of a Federal agency shall transmit to the
19 Director notice of the participation of their re-
20 spective Federal agency in a standards activity
21 relating to artificial intelligence and other crit-
22 ical and emerging technologies.

23 (B) MECHANISM.—The Director shall, in
24 coordination with the Director of the Office of
25 Management and Budget, develop a mechanism

1 for reporting participation by Federal agencies
2 in standards activities.

3 (b) WEB PORTAL.—

4 (1) IN GENERAL.—In order to inform United
5 States industry and Federal agencies about existing
6 and ongoing international efforts to develop tech-
7 nical standards for artificial intelligence and other
8 critical and emerging technologies and opportunities
9 for participation in such efforts, the Director shall
10 establish an accessible web portal to help such indus-
11 try and agencies navigate and participate in such ef-
12 forts.

13 (2) CONTENTS.—The web portal established
14 pursuant to paragraph (1) shall include regularly
15 updated lists of the following:

16 (A) International efforts described in para-
17 graph (1) and information on opportunities for
18 participation in such efforts.

19 (B) Information on accessing standards,
20 both in development and published, for artificial
21 intelligence and other critical and emerging
22 technologies.

23 (3) ADMINISTRATION.—The Director may inter-
24 into such cooperative agreements with such non-
25 governmental organizations as the Director considers

1 appropriate to establish the web portal required by
2 paragraph (1).

3 **SEC. 4. PILOT PROGRAM TO SUPPORT STANDARDS MEET-**
4 **INGS FOR ARTIFICIAL INTELLIGENCE AND**
5 **OTHER CRITICAL AND EMERGING TECH-**
6 **NOLOGIES IN THE UNITED STATES.**

7 (a) PILOT PROGRAM REQUIRED.—

8 (1) IN GENERAL.—Not later than 180 days
9 after the date of the enactment of this Act, and sub-
10 ject to the availability of appropriated funds, the Di-
11 rector shall, in coordination with the heads of such
12 other Federal agencies as the Director considers ap-
13 propriate, establish a pilot program on supporting
14 standards meetings for artificial intelligence and
15 other critical and emerging technologies in the
16 United States by—

17 (A) conducting prestandardization and
18 standards coordination meetings with stake-
19 holders; and

20 (B) awarding grants to eligible entities de-
21 scribed in subsection (b) hosting meetings of or-
22 ganizations described in paragraph (1) of such
23 subsection to support the hosting of such meet-
24 ings in the United States.

1 (2) ADMINISTRATION.—The Director may carry
2 out the pilot program required by paragraph (1) by
3 entering into such cooperative agreements with such
4 nongovernmental organizations as the Director con-
5 siders appropriate to establish and administer the
6 pilot program.

7 (b) ELIGIBLE ENTITIES.—For purposes of the pilot
8 program required by subsection (a), an eligible entity is—

9 (1) an organization that is developing standards
10 and specifications for artificial intelligence and other
11 critical and emerging technologies for at least 1
12 technical standard that affects the interests of 1 or
13 more Federal agencies; or

14 (2) an entity that hosts an organization de-
15 scribed in paragraph (1).

16 (c) GRANTS.—

17 (1) IN GENERAL.—In carrying out the pilot
18 program required by subsection (a), the Director
19 shall award grants to eligible entities to host meet-
20 ings as described in such subsection.

21 (2) USE OF FUNDS.—An eligible entity receiv-
22 ing a grant under this subsection to host a meeting
23 in the United States may use the amount of the
24 grant for such costs as the Director considers rea-
25 sonable for hosting the meeting in the United

1 States, but not more than fifty percent of antici-
 2 pated cost of hosting the meeting and not more than
 3 a maximum amount that the Director shall establish
 4 for purposes of this subsection. Such costs may in-
 5 clude the following:

6 (A) Costs related to the preparation and
 7 planning of meetings described in subsection
 8 (a).

9 (B) Meeting venue-related expenses.

10 (C) Such other costs that may support the
 11 eligible entity in conducting a standards meet-
 12 ing in the United States.

13 (3) CONSIDERATIONS.—In deciding whether to
 14 award a grant under this subsection to an eligible
 15 entity to host a meeting, the Director may consider
 16 the extent to which the eligible entity—

17 (A) is or hosts an organization that admin-
 18 isters technical standards activity in artificial
 19 intelligence and other critical and emerging
 20 technologies that involves United States-based
 21 participants, including participants from Fed-
 22 eral agencies of the United States;

23 (B) has a demonstrable history of partici-
 24 pating in or hosting successful meetings; and

1 (C) has a stable or growing participant
2 base.

3 (d) GUIDANCE.—

4 (1) IN GENERAL.—The Director shall develop
5 and periodically update guidance for the pilot pro-
6 gram carried out under this section.

7 (2) ELEMENTS.—The guidance developed and
8 updated pursuant to paragraph (1) shall cover the
9 following:

10 (A) Eligibility for grants awarded under
11 the pilot program.

12 (B) How grants are awarded under sub-
13 section (e).

14 (C) The duration and amounts of grants
15 awarded under subsection (e).

16 (D) The merit review process for the pilot
17 program.

18 (E) Priority areas for technical standards
19 activity.

20 (F) Means for recipients of grants under
21 the pilot program to report expenses relating to
22 costs described in subsection (e)(2)(D).

23 (G) Such additional matters as the Direc-
24 tor determines appropriate for purposes of the
25 pilot program.

1 (e) BRIEFINGS FOR CONGRESS.—

2 (1) IN GENERAL.—During the third year of the
3 pilot program carried out under this section and in
4 each subsequent year of the pilot program, the Di-
5 rector shall provide Congress with a briefing on the
6 pilot program.

7 (2) ELEMENTS.—Each briefing provided pursu-
8 ant to paragraph (1) shall include the following:

9 (A) An assessment of the effectiveness of
10 the pilot program with respect to improving the
11 hosting of standards meetings in the United
12 States.

13 (B) Identification of the recipients of
14 grants under the pilot program.

15 (C) The geographic distribution of
16 attendees at meetings supported with grants
17 under the pilot program.

18 (D) A summary of the expenses for which
19 the amounts of grants awarded under the pilot
20 program were used.

21 (f) RECOMMENDATIONS FOR PERMANENT IMPLE-
22 MENTATION.—If, before the date that is 3 years after the
23 date of the enactment of this Act, the Director determines
24 that conducting prestandardization and standards coordi-
25 nation meetings with stakeholders or awarding grants as

1 described in subsection (a) is feasible and advisable, the
 2 Director shall, not later than 3 years after the date of
 3 the enactment of this Act—

4 (1) develop recommendations for such legisla-
 5 tive or administrative action as the Director con-
 6 siders appropriate to establish a permanent imple-
 7 mentation of the pilot program; and

8 (2) submit to Congress the recommendations
 9 developed pursuant to paragraph (1).

10 (g) **AUTHORIZATION OF APPROPRIATIONS.**—There is
 11 authorized to be appropriated to carry out this section
 12 \$10,000,000 for the period of fiscal years 2024 through
 13 2028.

14 **SECTION 1. SHORT TITLE.**

15 *This Act may be cited as the “Promoting United States
 16 Leadership in Standards Act of 2024”.*

17 **SEC. 2. DEFINITIONS.**

18 *In this Act:*

19 (1) **ARTIFICIAL INTELLIGENCE AND OTHER CRIT-**
 20 **ICAL AND EMERGING TECHNOLOGIES.**—*The term “ar-*
 21 *tificial intelligence and other critical and emerging*
 22 *technologies” means a subset of artificial intelligence*
 23 *and other critical and emerging technologies included*
 24 *in the list of such technologies identified and main-*
 25 *tained by the National Science and Technology Coun-*

1 *cil of the Office of Science and Technology Policy as*
2 *the Director considers appropriate for purposes of this*
3 *Act.*

4 (2) *DIRECTOR.*—*The term “Director” means the*
5 *Director of the National Institute of Standards and*
6 *Technology.*

7 **SEC. 3. UNITED STATES PARTICIPATION IN ORGANIZA-**
8 **TIONS DEVELOPING STANDARDS AND SPECI-**
9 **FICATIONS FOR ARTIFICIAL INTELLIGENCE**
10 **AND OTHER CRITICAL AND EMERGING TECH-**
11 **NOLOGIES.**

12 (a) *BRIEFING REQUIRED.*—

13 (1) *IN GENERAL.*—*Not later than 1 year after*
14 *the date of the enactment of this Act, the Director*
15 *shall provide to Congress a briefing to assist in the*
16 *evaluation and identification of opportunities for*
17 *Federal Government support for industry-led efforts*
18 *in the development of technical standards for artifi-*
19 *cial intelligence and other critical and emerging tech-*
20 *nologies.*

21 (2) *INTERAGENCY CONSULTATION.*—*In preparing*
22 *the briefing required by paragraph (1), the Director*
23 *shall consult with the heads of such Federal agencies*
24 *as the Director considers relevant.*

1 (3) *ELEMENTS.*—*The briefing provided pursuant*
2 *to paragraph (1) shall include the following:*

3 (A) *An overview of standards activities re-*
4 *lating to artificial intelligence and other critical*
5 *and emerging technologies and information*
6 *about the following:*

7 (i) *Key technical standards that are*
8 *the subject of ongoing activity.*

9 (ii) *Key standards bodies hosting these*
10 *activities.*

11 (iii) *Any Federal agency that is par-*
12 *ticipating in these activities.*

13 (B) *An analysis identifying where partici-*
14 *pation by United States industry and Federal*
15 *agencies in standards activities in artificial in-*
16 *telligence and other critical and emerging tech-*
17 *nologies would be facilitated or enhanced by con-*
18 *ducting standards meetings hosted in the United*
19 *States.*

20 (C) *Recommendations for effectively inform-*
21 *ing United States industry and Federal agencies*
22 *on ongoing standardization activities with the*
23 *objective of increasing participation of such in-*
24 *dustry and agencies in such activities.*

25 (4) *FEDERAL AGENCY NOTICE REQUIREMENT.*—

1 (A) *IN GENERAL.*—Using the mechanism es-
2 tablished pursuant to subparagraph (B), each
3 head of a Federal agency shall transmit to the
4 Director notice of the participation of their re-
5 spective Federal agency in a standards activity
6 relating to artificial intelligence and other crit-
7 ical and emerging technologies.

8 (B) *MECHANISM.*—The Director shall, in
9 coordination with the Director of the Office of
10 Management and Budget, develop a mechanism
11 for reporting participation by Federal agencies
12 in standards activities.

13 (b) *WEB PORTAL.*—

14 (1) *IN GENERAL.*—In order to inform United
15 States industry and Federal agencies about existing
16 and ongoing international efforts to develop technical
17 standards for artificial intelligence and other critical
18 and emerging technologies and opportunities for par-
19 ticipation in such efforts, the Director shall establish
20 an accessible web portal to help such industry and
21 agencies navigate and participate in such efforts.

22 (2) *CONTENTS.*—The web portal established pur-
23 suant to paragraph (1) shall include regularly up-
24 dated lists of the following:

1 (A) *International efforts described in para-*
2 *graph (1) and information on opportunities for*
3 *participation in such efforts.*

4 (B) *Information on accessing standards,*
5 *both in development and published, for artificial*
6 *intelligence and other critical and emerging tech-*
7 *nologies.*

8 (3) *ADMINISTRATION.—The Director may inter-*
9 *into such cooperative agreements with such non-*
10 *governmental organizations as the Director considers*
11 *appropriate to establish the web portal required by*
12 *paragraph (1).*

13 **SEC. 4. PILOT PROGRAM TO SUPPORT STANDARDS MEET-**
14 **INGS FOR ARTIFICIAL INTELLIGENCE AND**
15 **OTHER CRITICAL AND EMERGING TECH-**
16 **NOLOGIES IN THE UNITED STATES.**

17 (a) *PILOT PROGRAM REQUIRED.—*

18 (1) *IN GENERAL.—Not later than 180 days after*
19 *the date of the enactment of this Act, and subject to*
20 *the availability of appropriated funds, the Director*
21 *shall, in coordination with the heads of such other*
22 *Federal agencies as the Director considers appro-*
23 *priate, establish a pilot program on supporting*
24 *standards meetings for artificial intelligence and*
25 *other critical and emerging technologies in the United*

1 *States by awarding grants to eligible entities de-*
2 *scribed in subsection (b) hosting meetings of organiza-*
3 *tions described in paragraph (1) of such subsection to*
4 *support the hosting of such meetings in the United*
5 *States.*

6 (2) *ADMINISTRATION.*—*The Director may carry*
7 *out the pilot program required by paragraph (1) by*
8 *entering into such cooperative agreements with such*
9 *nongovernmental organizations as the Director con-*
10 *siders appropriate to establish and administer the*
11 *pilot program.*

12 (b) *ELIGIBLE ENTITIES.*—*For purposes of the pilot*
13 *program required by subsection (a), an eligible entity is—*

14 (1) *an organization that is developing standards*
15 *and specifications for artificial intelligence and other*
16 *critical and emerging technologies for at least 1 tech-*
17 *nical standard that affects the interests of 1 or more*
18 *Federal agencies; or*

19 (2) *an entity that hosts an organization de-*
20 *scribed in paragraph (1).*

21 (c) *GRANTS.*—

22 (1) *IN GENERAL.*—*In carrying out the pilot pro-*
23 *gram required by subsection (a), the Director shall*
24 *award grants to eligible entities to host meetings as*
25 *described in such subsection.*

1 (2) *USE OF FUNDS.*—*An eligible entity receiving*
2 *a grant under this subsection to host a meeting in the*
3 *United States may use the amount of the grant for*
4 *such costs as the Director considers reasonable for*
5 *hosting the meeting in the United States, but not*
6 *more than fifty percent of anticipated cost of hosting*
7 *the meeting and not more than a maximum amount*
8 *that the Director shall establish for purposes of this*
9 *subsection. Such costs may include the following:*

10 (A) *Costs related to the preparation and*
11 *planning of meetings described in subsection (a).*

12 (B) *Meeting venue-related expenses.*

13 (C) *Such other costs that may support the*
14 *eligible entity in conducting a standards meeting*
15 *in the United States.*

16 (3) *CONSIDERATIONS.*—*In deciding whether to*
17 *award a grant under this subsection to an eligible en-*
18 *tity to host a meeting, the Director may consider the*
19 *extent to which the eligible entity—*

20 (A) *is or hosts an organization that admin-*
21 *isters technical standards activity in artificial*
22 *intelligence and other critical and emerging tech-*
23 *nologies that involves United States-based par-*
24 *ticipants, including but not limited to partici-*
25 *pants from Federal agencies of the United States;*

1 (B) has a demonstrable history of partici-
2 pating in or hosting successful meetings; and

3 (C) has a stable or growing participant
4 base.

5 (d) GUIDANCE.—

6 (1) IN GENERAL.—The Director shall develop
7 and periodically update guidance for the pilot pro-
8 gram carried out under this section.

9 (2) ELEMENTS.—The guidance developed and
10 updated pursuant to paragraph (1) shall cover the
11 following:

12 (A) Eligibility for grants awarded under
13 the pilot program.

14 (B) How grants are awarded under sub-
15 section (c).

16 (C) The duration and amounts of grants
17 awarded under subsection (c).

18 (D) The merit review process for the pilot
19 program.

20 (E) Priority areas for technical standards
21 activity.

22 (F) Means for recipients of grants under the
23 pilot program to report expenses relating to costs
24 described in subsection (c)(2)(D).

1 (G) *Such additional matters as the Director*
2 *determines appropriate for purposes of the pilot*
3 *program.*

4 (e) *BRIEFINGS FOR CONGRESS.—*

5 (1) *IN GENERAL.—During the third year of the*
6 *pilot program carried out under this section and in*
7 *each subsequent year of the pilot program, the Direc-*
8 *tor shall provide Congress with a briefing on the pilot*
9 *program.*

10 (2) *ELEMENTS.—Each briefing provided pursu-*
11 *ant to paragraph (1) shall include the following:*

12 (A) *An assessment of the effectiveness of the*
13 *pilot program with respect to improving the*
14 *hosting of standards meetings in the United*
15 *States.*

16 (B) *Identification of the recipients of grants*
17 *under the pilot program.*

18 (C) *The geographic distribution of attendees*
19 *at meetings supported with grants under the*
20 *pilot program.*

21 (D) *A summary of the expenses for which*
22 *the amounts of grants awarded under the pilot*
23 *program were used.*

24 (f) *RECOMMENDATIONS FOR PERMANENT IMPLEMEN-*
25 *TATION.—If, before the date that is 2 years after the date*

1 *of the enactment of this Act, the Director determines that*
2 *providing support as described in subsection (a) is feasible*
3 *and advisable, the Director shall, not later than 2 years*
4 *after the date of the enactment of this Act—*

5 *(1) develop recommendations for such legislative*
6 *or administrative action as the Director considers ap-*
7 *propriate to establish a permanent implementation of*
8 *the pilot program; and*

9 *(2) submit to Congress the recommendations de-*
10 *veloped pursuant to paragraph (1).*

11 *(g) TERMINATION.—The pilot program required by*
12 *subsection (a)(1) shall terminate on the date that is 5 years*
13 *after the date of the enactment of this Act.*

14 *(h) AUTHORIZATION OF APPROPRIATIONS.—There is*
15 *authorized to be appropriated to carry out this section*
16 *\$5,000,000 for the period of fiscal years 2024 through 2028.*

Calendar No. 482

118TH CONGRESS
2^D SESSION
S. 3849

A BILL

To promote United States leadership in technical standards by directing the National Institute of Standards and Technology and the Department of State to take certain actions to encourage and enable United States participation in developing standards and specifications for artificial intelligence and other critical and emerging technologies, and for other purposes.

August 1, 2024

Reported with an amendment