

YOUNG-1

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: To establish in the National Institute of Standards and Technology the Foundation for Standards and Metrology.

**IN THE SENATE OF THE UNITED STATES—118th Cong., 2d Sess.**

**S. 4178**

To establish artificial intelligence standards, metrics, and evaluation tools, to support artificial intelligence research, development, and capacity building activities, to promote innovation in the artificial intelligence industry by ensuring companies of all sizes can succeed and thrive, 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 intended to be proposed by Mr. YOUNG

*for himself and Mr. Hickenlooper*

Viz:

1 At the appropriate place, insert the following:

2 **SEC. \_\_\_\_ . FOUNDATION FOR STANDARDS AND METROL-**

3 **OGY.**

4 (a) **IN GENERAL.**—Subtitle B of title II of the Re-  
5 search and Development, Competition, and Innovation Act  
6 (42 U.S.C. 18931 et seq.; relating to measurement re-  
7 search of the National Institute of Standards and Tech-  
8 nology for the future; enacted as part of division B of Pub-

1 lie Law 117-167) is amended by adding at the end the  
2 following new section:

3 **"SEC. 10236. FOUNDATION FOR STANDARDS AND METROL-**  
4 **OGY.**

5 "(a) **ESTABLISHMENT.**—The Secretary, acting  
6 through the Director, shall establish a nonprofit corpora-  
7 tion to be known as the 'Foundation for Standards and  
8 Metrology'.

9 "(b) **MISSION.**—The mission of the Foundation shall  
10 be to—

11 "(1) support the Institute in carrying out its  
12 activities and mission to advance measurement  
13 science, technical standards, and technology in ways  
14 that enhance the economic security and prosperity of  
15 the United States; and

16 "(2) advance collaboration with researchers, in-  
17 stitutions of higher education, industry, and non-  
18 profit and philanthropic organizations to accelerate  
19 the development of technical standards, measure-  
20 ment science, and the commercialization of emerging  
21 technologies in the United States.

22 "(c) **ACTIVITIES.**—In carrying out its mission under  
23 subsection (b), the Foundation may carry out the fol-  
24 lowing:

1           “(1) Support international metrology and tech-  
2           nical standards engagement activities.

3           “(2) Support studies, projects, and research on  
4           metrology and the development of benchmarks and  
5           technical standards infrastructure across the Insti-  
6           tute’s mission areas.

7           “(3) Advance collaboration between the Insti-  
8           tute and researchers, industry, nonprofit and philan-  
9           thropic organizations, institutions of higher edu-  
10          cation, federally funded research and development  
11          centers, and State, Tribal, and local governments.

12          “(4) Support the expansion and improvement of  
13          research facilities and infrastructure at the Institute  
14          to advance the development of emerging tech-  
15          nologies.

16          “(5) Support the commercialization of federally  
17          funded research.

18          “(6) Conduct education and outreach activities.

19          “(7) Offer direct support to NIST associates,  
20          including through the provision of fellowships,  
21          grants, stipends, travel, health insurance, profes-  
22          sional development training, housing, technical and  
23          administrative assistance, recognition awards for  
24          outstanding performance, and occupational safety

1 and awareness training and support, and other ap-  
2 propriate expenditures.

3 “(8) Conduct such other activities as deter-  
4 mined necessary by the Foundation to carry out its  
5 mission.

6 “(d) AUTHORITY OF THE FOUNDATION.—The Foun-  
7 dation shall be the sole entity responsible for carrying out  
8 the activities described in subsection (c).

9 “(e) STAKEHOLDER ENGAGEMENT.—The Founda-  
10 tion shall convene, and may consult with, representatives  
11 from the Institute, institutions of higher education, the  
12 private sector, non-profit organizations, and commer-  
13 cialization organizations to develop activities for the mis-  
14 sion of the Foundation under subsection (b) and to ad-  
15 vance the activities of the Foundation under subsection  
16 (c).

17 “(f) LIMITATION.—The Foundation shall not be an  
18 agency or instrumentality of the Federal Government.

19 “(g) SUPPORT.—The Foundation may receive, ad-  
20 minister, solicit, accept, and use funds, gifts, devises, or  
21 bequests, either absolutely or in trust of real or personal  
22 property or any income therefrom or other interest therein  
23 to support activities under subsection (c), except that this  
24 subsection shall not apply if any of such is from a foreign  
25 country of concern or a foreign entity of concern.

1       “(h) TAX EXEMPT STATUS.—The Board shall take  
2 all necessary and appropriate steps to ensure the Founda-  
3 tion is an organization described in section 501(c) of the  
4 Internal Revenue Code of 1986 and exempt from taxation  
5 under section 501(a) of such Code.

6       “(i) BOARD OF DIRECTORS.—

7           “(1) ESTABLISHMENT.—The Foundation shall  
8 be governed by a Board of Directors.

9           “(2) COMPOSITION.—

10           “(A) IN GENERAL.—The Board shall be  
11 composed of the following:

12           “(i) Eleven appointed voting members  
13 described in subparagraph (B).

14           “(ii) Ex officio nonvoting members de-  
15 scribed in subparagraph (C).

16       “(B) APPOINTED MEMBERS.—

17           “(i) INITIAL MEMBERS.—The Sec-  
18 retary, acting through the Director, shall—

19           “(I) seek to enter into an agree-  
20 ment with the National Academies of  
21 Sciences, Engineering, and Medicine  
22 to develop a list of individuals to serve  
23 as members of the Board who are well  
24 qualified and will meet the require-  
25 ments of clauses (ii) and (iii); and

1                   “(II) appoint the initial members  
2                   of the Board from such list, if appli-  
3                   cable, in consultation with the Na-  
4                   tional Academies of Sciences, Engi-  
5                   neering, and Medicine.

6                   “(ii) REPRESENTATION.—The ap-  
7                   pointed members of the Board shall reflect  
8                   a broad cross-section of stakeholders  
9                   across diverse sectors, regions and commu-  
10                  nities, including from academia, private  
11                  sector entities, technical standards bodies,  
12                  the investment community, the philan-  
13                  thropic community, and other nonprofit or-  
14                  ganizations.

15                  “(iii) EXPERIENCE.—The Secretary,  
16                  acting through the Director, shall ensure  
17                  the appointed members of the Board have  
18                  the experience and are qualified to provide  
19                  advice and information to advance the  
20                  Foundation’s mission, including in science  
21                  and technology research and development,  
22                  technical standards, education, technology  
23                  transfer, commercialization, or other as-  
24                  pects of the Foundation’s mission.

25                  “(C) NONVOTING MEMBERS.—

1                   “(i) EX OFFICIO MEMBERS.—The Di-  
2                   rector (or Director’s designee) shall be an  
3                   ex officio member of the Board.

4                   “(ii) NO VOTING POWER.—The ex  
5                   officio members described in clause (i)  
6                   shall not have voting power on the Board.

7                   “(3) CHAIR AND VICE CHAIR.—

8                   “(A) IN GENERAL.—The Board shall des-  
9                   ignate, from among its members—

10                   “(i) an individual to serve as the chair  
11                   of the Board; and

12                   “(ii) an individual to serve as the vice  
13                   chair of the Board.

14                   “(B) TERMS.—The term of service of the  
15                   Chair and Vice Chair of the Board shall end on  
16                   the earlier of—

17                   “(i) the date that is 3 years after the  
18                   date on which the Chair or Vice Chair of  
19                   the Board, as applicable, is designated for  
20                   the respective position; and

21                   “(ii) the last day of the term of serv-  
22                   ice of the member, as determined under  
23                   paragraph (4)(A), who is designated to be  
24                   Chair or Vice Chair of the Board, as appli-  
25                   cable.

1                   “(C) REPRESENTATION.—The Chair and  
2 Vice Chair of the Board—

3                   “(i) may not be representatives of the  
4 same area of subject matter expertise, or  
5 entity, as applicable; and

6                   “(ii) may not be representatives of  
7 any area of subject matter expertise, or en-  
8 tity, as applicable, represented by the im-  
9 mediately preceding Chair and Vice Chair  
10 of the Board.

11                   “(4) TERMS AND VACANCIES.—

12                   “(A) TERM LIMITS.—Subject to subpara-  
13 graph (B), the term of office of each member  
14 of the Board shall be not more than five years,  
15 except that a member of the Board may con-  
16 tinue to serve after the expiration of the term  
17 of such member until the expiration of the 180-  
18 day period beginning on the date on which the  
19 term of such member expires, if no new member  
20 is appointed to replace the departing board  
21 member.

22                   “(B) INITIAL APPOINTED MEMBERS.—Of  
23 the initial members of the Board appointed  
24 under paragraph (4)(A), half of such members  
25 shall serve for four years and half of such mem-



1           bers shall serve for five years, as determined by  
2           the Chair of the Board.

3           “(C) VACANCIES.—Any vacancy in the  
4           membership of the appointed members of the  
5           Board—

6                   “(i) shall be filled in accordance with  
7                   the bylaws of the Foundation by an indi-  
8                   vidual capable of representing the same  
9                   area or entity, as applicable, as rep-  
10                  resented by the vacating board member  
11                  under paragraph (2)(B)(ii);

12                   “(ii) shall not affect the power of the  
13                   remaining appointed members to carry out  
14                   the duties of the Board; and

15                   “(iii) shall be filled by an individual  
16                   selected by the Board.

17           “(5) QUORUM.—A majority of the members of  
18           the Board shall constitute a quorum for the pur-  
19           poses of conducting the business of the Board.

20           “(6) DUTIES.—The Board shall carry out the  
21           following:

22                   “(A) Establish bylaws for the Foundation  
23                   in accordance with paragraph (7).



1                   “(I) The acceptance, solicitation,  
2                   and disposition of donations and  
3                   grants to the Foundation, including  
4                   appropriate limits on the ability of do-  
5                   nors to designate, by stipulation or re-  
6                   striction, the use or recipient of do-  
7                   nated funds.

8                   “(II) The disposition of assets of  
9                   the Foundation.

10                  “(iii) Policies that subject all employ-  
11                  ees, fellows, trainees, and other agents of  
12                  the Foundation (including appointed voting  
13                  members and ex officio members of the  
14                  Board) to conflict of interest standards.

15                  “(iv) The specific duties of the Execu-  
16                  tive Director of the Foundation.

17                  “(B) The bylaws of the Foundation and  
18                  activities carried out under such bylaws do  
19                  not—

20                         “(i) reflect unfavorably upon the abil-  
21                         ity of the Foundation to carry out its re-  
22                         sponsibilities or official duties in a fair and  
23                         objective manner; or

24                         “(ii) compromise, or appear to com-  
25                         promise, the integrity of any governmental

1           agency or program, or any officer or em-  
2           ployee employed by, or involved in a gov-  
3           ernmental agency or program.

4           “(8) RESTRICTIONS ON MEMBERSHIP.—

5           “(A) EMPLOYEES.—No employee of the  
6           Department of Commerce may be appointed as  
7           a voting member of the Board.

8           “(B) STATUS.—Each voting member of  
9           the Board shall be—

10           “(i) a citizen of the United States;

11           “(ii) a national of the United States  
12           (as such term is defined in section 101(a)  
13           of the Immigration and Nationality Act (8  
14           U.S.C. 1101(a));

15           “(iii) an alien admitted as a refugee  
16           under section 207 of such Act (8 U.S.C.  
17           1157); or

18           “(iv) an alien lawfully admitted to the  
19           United States for permanent residence.

20           “(9) COMPENSATION.—

21           “(A) IN GENERAL.—Members of the Board  
22           may not receive compensation for serving on  
23           the Board.

24           “(B) CERTAIN EXPENSES.—In accordance  
25           with the bylaws of the Foundation, members of

1 the Board may be reimbursed for travel ex-  
2 penses, including per diem in lieu of subsist-  
3 ence, and other necessary expenses incurred in  
4 carrying out the duties of the Board.

5 “(10) LIAISON REPRESENTATIVES.—The Sec-  
6 retary, acting through the Director, shall designate  
7 representatives from across the Institute to serve as  
8 the liaisons to the Board and the Foundation.

9 “(11) PERSONAL LIABILITY OF BOARD MEM-  
10 BERS.—The members of the Board shall not be per-  
11 sonally liable, except for malfeasance.

12 “(j) ADMINISTRATION.—

13 “(1) EXECUTIVE DIRECTOR.—

14 “(A) IN GENERAL.—The Foundation shall  
15 have an Executive Director who shall be ap-  
16 pointed by the Board, and who shall serve at  
17 the pleasure of the Board, and for whom the  
18 Board shall establish the rate of compensation.  
19 Subject to the bylaws established under sub-  
20 section (i)(7), the Executive Director shall be  
21 responsible for the daily operations of the  
22 Foundation in carrying out the activities of the  
23 Foundation under subsection (c).

24 “(B) RESPONSIBILITIES.—In carrying out  
25 the daily operations of the Foundation, the Ex-



1                   “(III) an alien admitted as a ref-  
2                   ugee under section 207 of such Act (8  
3                   U.S.C. 1157); or

4                   “(IV) an alien lawfully admitted  
5                   to the United States for permanent  
6                   residence.

7                   “(ii) OFFICERS AND EMPLOYEES.—  
8                   Each officer or employee of the Founda-  
9                   tion shall be—

10                   “(I) a citizen of the United  
11                   States;

12                   “(II) a national of the United  
13                   States (as such term is defined in sec-  
14                   tion 101(a) of the Immigration and  
15                   Nationality Act (8 U.S.C. 1101(a));

16                   “(III) an alien admitted as a ref-  
17                   ugee under section 207 of such Act (8  
18                   U.S.C. 1157); or

19                   “(IV) an alien lawfully admitted  
20                   to the United States for permanent  
21                   residence.

22                   “(2) ADMINISTRATIVE CONTROL.—No member  
23                   of the Board, officer or employee of the Foundation  
24                   or of any program established by the Foundation, or  
25                   participant in a program established by the Founda-

1       tion, may exercise administrative control over any  
2       Federal employee.

3               “(3) TRANSFER OF FUNDS TO INSTITUTE.—

4       The Foundation may transfer funds and property to  
5       the Institute, which the Institute may accept and  
6       use and which shall be subject to all applicable Fed-  
7       eral limitations relating to federally funded research.

8               “(4) STRATEGIC PLAN.—Not later than one  
9       year after the establishment of the Foundation, the  
10       Foundation shall submit to the Committee on  
11       Science, Space, and Technology of the House of  
12       Representatives and the Committee on Commerce,  
13       Science, and Transportation of the Senate a stra-  
14       tegic plan that contains the following:

15               “(A) A plan for the Foundation to become  
16       financially self-sustaining in the next five years.

17               “(B) Short- and long-term objectives of the  
18       Foundation, as identified by the Board.

19               “(C) A description of the efforts the Foun-  
20       dation will take to be transparent in the proc-  
21       esses of the Foundation, including processes re-  
22       lating to the following:

23               “(i) Grant awards, including selection,  
24       review, and notification.



1                   “(ii) Communication of past, current,  
2                   and future research priorities.

3                   “(iii) Solicitation of and response to  
4                   public input on the priorities identified by  
5                   the Foundation.

6                   “(D) A description of the financial goals  
7                   and benchmarks of the Foundation for the fol-  
8                   lowing ten years.

9                   “(E) A description of the efforts under-  
10                  taken by the Foundation to ensure maximum  
11                  complementarity and minimum redundancy  
12                  with investments made by the Institute.

13                  “(5) REPORT.—

14                  “(A) IN GENERAL.—Not later than 18  
15                  months after the establishment of the Founda-  
16                  tion and not later than February 1 of each year  
17                  thereafter, the Foundation shall publish a re-  
18                  port describing the activities of the Foundation  
19                  during the immediately preceding fiscal year.  
20                  Each such report shall include with respect to  
21                  such fiscal year a comprehensive statement of  
22                  the operations, activities, financial condition,  
23                  progress, and accomplishments of the Founda-  
24                  tion.

1           “(B) FINANCIAL CONDITION.—With re-  
2           spect to the financial condition of the Founda-  
3           tion, each report under subparagraph (A) shall  
4           include the source, and a description of, all sup-  
5           port under subsection (g) provided to the Foun-  
6           dation. Each such report shall identify the per-  
7           sons or entities from which such support is re-  
8           ceived, and include a specification of any re-  
9           strictions on the purposes for which such sup-  
10          port may be used.

11          “(C) PUBLICATION.—The Foundation  
12          shall make copies of each report submitted  
13          under subparagraph (A) available—

14                 “(i) for public inspection, and shall  
15                 upon request provide a copy of the report  
16                 to any individual for a charge not to ex-  
17                 ceed the cost of providing such copy; and

18                 “(ii) to the Committee on Science,  
19                 Space, and Technology of the House of  
20                 Representatives and the Committee on  
21                 Commerce, Science, and Transportation of  
22                 the Senate.

23          “(6) AUDITS AND DISCLOSURE.—The Founda-  
24          tion shall—

1           “(A) provide for annual audits of the fi-  
2           nancial condition of the Foundation, including a  
3           full list of the Foundation’s donors and any re-  
4           strictions on the purposes for which gifts to the  
5           Foundation may be used; and

6           “(B) make such audits, and all other  
7           records, documents, and other papers of the  
8           Foundation, available to the Secretary and the  
9           Comptroller General of the United States for  
10          examination or audit.

11          “(7) EVALUATION BY COMPTROLLER GEN-  
12          ERAL.—Not later than five years after the date on  
13          which the Foundation is established, the Comptroller  
14          General of the United States shall submit to the  
15          Committee on Science, Space, and Technology of the  
16          House of Representatives and the Committee on  
17          Commerce, Science, and Transportation of the Sen-  
18          ate the following:

19                 “(A) An evaluation of the following:

20                         “(i) The extent to which the Founda-  
21                         tion is achieving the mission of the Foun-  
22                         dation.

23                         “(ii) The operation of the Foundation.

24                 “(B) Any recommendations on how the  
25          Foundation may be improved.

1       “(k) INTEGRITY.—

2               “(1) IN GENERAL.—To ensure integrity in the  
3 operations of the Foundation, the Board shall de-  
4 velop and enforce procedures relating to standards  
5 of conduct, financial disclosure statements, conflicts  
6 of interest (including recusal and waiver rules), au-  
7 dits, and any other matters determined appropriate  
8 by the Board.

9               “(2) FINANCIAL CONFLICTS OF INTEREST.—To  
10 mitigate conflicts of interest and risks from malign  
11 foreign influence, any individual who is an officer,  
12 employee, or member of the Board is prohibited  
13 from any participation in deliberations by the Foun-  
14 dation of a matter that would directly or predictably  
15 affect any financial interest of any of the following:

16                       “(A) Such individual.

17                       “(B) A relative of such individual.

18                       “(C) A business organization or other enti-  
19 ty in which such individual or relative of such  
20 individual has an interest, including an organi-  
21 zation or other entity with which such indi-  
22 vidual is negotiating employment.

23               “(3) SECURITY.—This section shall be carried  
24 out in accordance with the provision of subtitle D of  
25 title VI of the Research and Development, Competi-

1 tion, and Innovation Act (42 U.S.C. 19231 et seq.;  
2 enacted as part of division B of Public Law 117–  
3 167) and section 223 of the William M. (Mac)  
4 Thornberry National Defense Authorization Act for  
5 Fiscal Year 2021 (42 U.S.C. 6605).

6 “(l) INTELLECTUAL PROPERTY.—The Board shall  
7 adopt written standards to govern the ownership and li-  
8 censing of any intellectual property rights developed by the  
9 Foundation or derived from the collaborative efforts of the  
10 Foundation

11 “(m) FULL FAITH AND CREDIT.—The United States  
12 shall not be liable for any debts, defaults, acts, or omis-  
13 sions of the Foundation. The full faith and credit of the  
14 United States shall not extend to any obligations of the  
15 Foundation.

16 “(n) SUPPORT SERVICES.—The Secretary, acting  
17 through the Director, may provide facilities, utilities, and  
18 support services to the Foundation if it is determined by  
19 the Director to be advantageous to the research programs  
20 of the Institute.

21 “(o) NONAPPLICABILITY.—Chapter 10 of title 5,  
22 United States Code, shall not apply to the Foundation.

23 “(p) SEPARATE FUND ACCOUNTS.—The Board shall  
24 ensure that amounts received pursuant to the authoriza-  
25 tion of appropriations under subsection (q) are held in a

1 separate account from any other funds received by the  
2 Foundation.

3       “(q) FUNDING; AUTHORIZATION OF APPROPRIA-  
4 TIONS.—Notwithstanding any other provision of law, from  
5 amounts authorized to be appropriated for a fiscal year  
6 beginning with fiscal year 2025 to the Secretary of Com-  
7 merce pursuant to section 10211, the Director may trans-  
8 fer not less than \$500,000 and not more than \$1,250,000  
9 to the Foundation each such fiscal year.

10       “(r) DEFINITIONS.—In this section:

11               “(1) BOARD.—The term ‘Board’ means the  
12 Board of Directors of the Foundation, established  
13 pursuant to subsection (i).

14               “(2) DIRECTOR.—The term ‘Director’ means  
15 the Director of the National Institute of Standards  
16 and Technology.

17               “(3) FOREIGN COUNTRY OF CONCERN.—The  
18 term ‘foreign country of concern’ has the meaning  
19 given such term in section 10638 of the Research  
20 and Development, Competition, and Innovation Act  
21 (42 U.S.C. 19237; enacted as part of division B of  
22 Public Law 117–167).

23               “(4) FOREIGN ENTITY OF CONCERN.—The  
24 term ‘foreign entity of concern’ has the meaning  
25 given such term in section 10638 of the Research

1 and Development, Competition, and Innovation Act  
2 (42 U.S.C. 19237; enacted as part of division B of  
3 Public Law 117-167).

4 “(5) FOUNDATION.—The term ‘Foundation’  
5 means the Foundation for Standards and Metrology  
6 established pursuant to subsection (a).

7 “(6) INSTITUTE.—The term ‘Institute’ means  
8 the National Institute of Standards and Technology.

9 “(7) INSTITUTION OF HIGHER EDUCATION.—  
10 The term ‘institution of higher education’ has the  
11 meaning given such term in section 101 of the High-  
12 er Education Act of 1965 (20 U.S.C. 1001).

13 “(8) NIST ASSOCIATE.—The term ‘NIST asso-  
14 ciate’ means any guest researcher, facility user, vol-  
15 unteer, or other nonemployee of the National Insti-  
16 tute of Standards and Technology who conducts re-  
17 search or otherwise engages in an authorized activity  
18 with National Institute of Standards and Technology  
19 personnel or at a National Institute of Standards  
20 and Technology facility.

21 “(9) RELATIVE.—The term ‘relative’ has the  
22 meaning given such term in section 13101 of title 5,  
23 United States Code.

24 “(10) SECRETARY.—The term ‘Secretary’  
25 means the Secretary of Commerce.

1           “(11) TECHNICAL STANDARD.—The term ‘tech-  
2           nical standard’ has the meaning given such term in  
3           section 12(d)(5) of the National Technology Trans-  
4           fer and Advancement Act of 1995 (15 U.S.C. 272  
5           note).”.

6           (b) CLERICAL AMENDMENT.—The table of contents  
7           in section 1 of Public Law 117–167 is amended by insert-  
8           ing after the item relating to section 10235 the following  
9           new item:

“Sec. 10236. Foundation for Standards and Metrology”.