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(Original Signature of Member)

116TH CONGRESS
2D SESSION

H. R.

To establish a new Directorate for Technology in the redesignated National Science and Technology Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, and innovation, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. KHANNA introduced the following bill; which was referred to the Committee on _____

A BILL

To establish a new Directorate for Technology in the redesignated National Science and Technology Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, and innovation, 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 “Endless Frontier Act”.

5 **SEC. 2. FINDINGS.**

6 Congress finds the following:

1 (1) For over 70 years, the United States has
2 been the unequivocal global leader in scientific and
3 technological innovation, and as a result the people
4 of the United States have benefitted through good-
5 paying jobs, economic prosperity, and a higher qual-
6 ity of life. Today, however, this leadership position
7 is being eroded and challenged by foreign competi-
8 tors, some of whom are stealing intellectual property
9 and trade secrets of the United States and aggres-
10 sively investing in fundamental research and com-
11 mercialization to dominate the key technology fields
12 of the future. While the United States once led the
13 world in the share of our economy invested in re-
14 search, our Nation now ranks 9th globally in total
15 research and development and 12th in publicly fi-
16 nanced research and development.

17 (2) Without a significant increase in investment
18 in research, education, technology transfer, and the
19 core strengths of the United States innovation eco-
20 system, it is only a matter of time before the global
21 competitors of the United States overtake the
22 United States in terms of technological primacy. The
23 country that wins the race in key technologies—such
24 as artificial intelligence, quantum computing, ad-

1 vanced communications, and advanced manufac-
2 turing—will be the superpower of the future.

3 (3) The Federal Government must catalyze
4 United States innovation by boosting fundamental
5 research investments focused on discovering, cre-
6 ating, commercializing, and producing new tech-
7 nologies to ensure the leadership of the United
8 States in the industries of the future.

9 (4) The distribution of innovation jobs and in-
10 vestment in the United States has become largely
11 concentrated in just a few locations, while much of
12 the Nation has been left out of growth in the innova-
13 tion sector. More than 90 percent of the Nation's in-
14 novation sector employment growth in the last 15
15 years was generated in just 5 major cities. The Fed-
16 eral Government must address this imbalance in op-
17 portunity by partnering with the private sector to
18 build new technology hubs across the country,
19 spreading innovation sector jobs more broadly, and
20 tapping the talent and potential of the entire Nation
21 to ensure the United States leads the industries of
22 the future.

23 (5) Since its inception, the National Science
24 Foundation has carried out vital work supporting
25 basic research and people to create knowledge that

1 is a primary driver of the economy of the United
2 States and enhances the Nation's security.

3 **SEC. 3. NATIONAL SCIENCE AND TECHNOLOGY FOUNDA-**
4 **TION.**

5 (a) REDESIGNATION OF NATIONAL SCIENCE FOUN-
6 DATION AS NATIONAL SCIENCE AND TECHNOLOGY FOUN-
7 DATION.—

8 (1) IN GENERAL.—Section 2 of the Act of May
9 10, 1950 (64 Stat. 149, chapter 171; 42 U.S.C.
10 1861) is amended—

11 (A) in the section heading, by inserting
12 “**AND TECHNOLOGY**” after “**SCIENCE**”; and

13 (B) by striking “the National Science
14 Foundation” and inserting “the National
15 Science and Technology Foundation”.

16 (2) REFERENCES.—Any reference in any law,
17 rule, regulation, certificate, directive, instruction, or
18 other official paper in force on the date of enactment
19 of this Act to the National Science Foundation shall
20 be considered to refer and apply to the National
21 Science and Technology Foundation.

22 (b) ESTABLISHMENT OF DEPUTY DIRECTOR FOR
23 TECHNOLOGY.—Section 6 of the Act of May 10, 1950 (64
24 Stat. 149, chapter 171; 42 U.S.C. 1864a) is amended—

1 (1) in the section heading, by striking “**DEP-**
2 **UTY DIRECTOR**” and inserting “**DEPUTY DIREC-**
3 **TORS**”;

4 (2) in the first sentence—

5 (A) by striking “a Deputy Director” and
6 inserting “2 Deputy Directors”; and

7 (B) by inserting “and in accordance with
8 the expedited procedures established under S.
9 Res. 116 (112th Congress)” after “the Senate”;
10 and

11 (3) in the third sentence, by striking “The Dep-
12 uty Director shall receive” and inserting “Each Dep-
13 uty Director shall receive”;

14 (4) by inserting after the third sentence the fol-
15 lowing: “The Deputy Director for Technology shall
16 oversee, and perform duties relating to, the Direc-
17 torate for Technology of the Foundation, as estab-
18 lished under section 8A, and the Deputy Director for
19 Science shall oversee, and perform duties relating to,
20 the other activities and directorates supported by the
21 Foundation.”; and

22 (5) in the fourth sentence, by striking “The
23 Deputy Director shall act” and inserting “The Dep-
24 uty Director for Science shall act”.

1 (c) ESTABLISHMENT OF DIRECTORATE FOR TECH-
2 NOLOGY.—The Act of May 10, 1950 (64 Stat. 149, chap-
3 ter 171; 42 U.S.C. 1861 et seq.) is amended—

4 (1) in section 8 (42 U.S.C. 1866), by inserting
5 at the end the following: “Such divisions shall in-
6 clude the Directorate for Technology established
7 under section 8A.”; and

8 (2) by inserting after section 8 the following:

9 **“SEC. 8A. DIRECTORATE FOR TECHNOLOGY.**

10 “(a) DEFINITIONS.—In this section:

11 “(1) DEPUTY DIRECTOR.—The term ‘Deputy
12 Director’ means the Deputy Director for Tech-
13 nology.

14 “(2) DESIGNATED COUNTRY.—The term ‘des-
15 ignated country’ means a country that has been ap-
16 proved and designated in writing by the President
17 for purposes of this section, after providing—

18 “(A) not less than 30 days of advance noti-
19 fication and explanation to the relevant con-
20 gressional committees before the designation;
21 and

22 “(B) in-person briefings to such commit-
23 tees, if requested during the 30-day advance no-
24 tification period described in subparagraph (A).

1 “(3) DIRECTORATE.—The term ‘Directorate’
2 means the Directorate for Technology established
3 under subsection (b).

4 “(4) INSTITUTION OF HIGHER EDUCATION.—
5 The term ‘institution of higher education’ has the
6 meaning given the term in section 101(a) of the
7 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

8 “(5) KEY TECHNOLOGY FOCUS AREAS.—The
9 term ‘key technology focus areas’ means the areas
10 included on the most recent list under subsection
11 (c)(2).

12 “(6) RELEVANT CONGRESSIONAL COMMIT-
13 TEES.—The term ‘relevant congressional commit-
14 tees’ means—

15 “(A) the Committee on Armed Services,
16 the Committee on Commerce, Science, and
17 Transportation, the Committee on Appropria-
18 tions, the Committee on Foreign Relations, and
19 the Select Committee on Intelligence of the
20 Senate; and

21 “(B) the Committee on Armed Services,
22 the Committee on Science, Space, and Tech-
23 nology, the Committee on Appropriations, the
24 Committee on Foreign Affairs, and the Perma-

1 nent Select Committee on Intelligence of the
2 House of Representatives.

3 “(b) ESTABLISHMENT.—

4 “(1) IN GENERAL.—Not later than 90 days
5 after the date of enactment of the Endless Frontier
6 Act, the Director shall establish in the Foundation
7 a Directorate for Technology. The Directorate shall
8 carry out the duties and responsibilities described in
9 this section, in order to further the following goals:

10 “(A) Strengthening the leadership of the
11 United States in critical technologies through
12 fundamental research in the key technology
13 focus areas.

14 “(B) Enhancing the competitiveness of the
15 United States in the key technology focus areas
16 by improving education in the key technology
17 focus areas and attracting more students to
18 such areas.

19 “(C) Consistent with the operations of the
20 Foundation, fostering the economic and societal
21 impact of federally funded research and devel-
22 opment through an accelerated translation of
23 fundamental advances in the key technology
24 focus areas into processes and products that
25 can help achieve national goals related to eco-

1 nomic competitiveness, domestic manufacturing,
2 national security, shared prosperity, energy and
3 the environment, health, education and work-
4 force development, and transportation.

5 “(2) DEPUTY DIRECTOR.—The Directorate
6 shall be headed by the Deputy Director.

7 “(3) ORGANIZATION AND ADMINISTRATIVE
8 MATTERS.—

9 “(A) HIRING AUTHORITY.—

10 “(i) EXPERTS IN SCIENCE AND ENGI-
11 NEERING.—The Director shall have the au-
12 thority to carry out a program of personnel
13 management authority for the Directorate
14 in the same manner, and subject to the
15 same requirements, as the program of per-
16 sonnel management authority authorized
17 for the Director of the Defense Advanced
18 Research Projects Agency under section
19 1599h of title 10, United States Code, for
20 the Defense Advanced Research Projects
21 Agency.

22 “(ii) HIGHLY QUALIFIED EXPERTS IN
23 NEEDED OCCUPATIONS.—In addition to
24 the authority provided under clause (i), the
25 Director shall have the authority to carry

1 out a program of personnel management
2 authority for the Directorate in the same
3 manner, and subject to the same require-
4 ments, as the program to attract highly
5 qualified experts carried out by the Sec-
6 retary of Defense under section 9903 of
7 title 5, United States Code.

8 “(iii) ADDITIONAL HIRING AUTHOR-
9 ITY.—To the extent needed to carry out
10 the duties in paragraph (1), the Director
11 shall utilize hiring authorities under sec-
12 tion 3372 of title 5, United States Code, to
13 staff the Directorate with employees from
14 other Federal agencies, State and local
15 governments, Indian tribes and tribal orga-
16 nizations, institutions of higher education,
17 and other organizations, as described in
18 that section, in the same manner and sub-
19 ject to the same conditions, that apply to
20 such individuals utilized to accomplish
21 other missions of the Foundation.

22 “(B) PROGRAM MANAGERS.—The employ-
23 ees of the Directorate may include program
24 managers for the key technology focus areas,
25 who shall perform a role similar to programs

1 managers employed by the Defense Advanced
2 Research Projects Agency for the oversight and
3 selection of programs supported by the Direc-
4 torate.

5 “(C) SELECTION OF RECIPIENTS.—Recipi-
6 ents of support under the programs and activi-
7 ties of the Directorate shall be selected by pro-
8 gram managers or other employees of the Di-
9 rectorate. The Directorate may use a peer re-
10 view process to inform the decisions of program
11 managers or other employees.

12 “(D) ASSISTANT DIRECTORS.—The Direc-
13 tor may appoint 1 or more Assistant Directors
14 for the Directorate as the Director determines
15 necessary, in the same manner as other Assist-
16 ant Directors of the Foundation are appointed.

17 “(4) REPORT.—Not later than 120 days after
18 the date of enactment of the Endless Frontier Act,
19 the Director shall prepare and submit a report to
20 the relevant congressional committees regarding the
21 establishment of the Directorate.

22 “(c) DUTIES AND FUNCTIONS OF THE DIREC-
23 TORATE.—

1 “(1) DEVELOPMENT OF TECHNOLOGY FOCUS
2 OF THE DIRECTORATE.—The Director, acting
3 through the Deputy Director, shall—

4 “(A) advance innovation in the key tech-
5 nology focus areas through fundamental re-
6 search and other activities described in this sec-
7 tion; and

8 “(B) develop and implement strategies to
9 ensure that the activities of the Directorate are
10 directed toward the key technology focus areas
11 in order to accomplish the goals described in
12 subparagraphs (A) through (C) of subsection
13 (b)(1) consistent with the most recent report
14 conducted under section 5(b) of the Endless
15 Frontier Act.

16 “(2) KEY TECHNOLOGY FOCUS AREAS.—

17 “(A) INITIAL LIST.—The initial key tech-
18 nology focus areas are—

19 “(i) artificial intelligence and machine
20 learning;

21 “(ii) high performance computing,
22 semiconductors, and advanced computer
23 hardware;

24 “(iii) quantum computing and infor-
25 mation systems;

1 “(iv) robotics, automation, and ad-
2 vanced manufacturing;

3 “(v) natural or anthropogenic disaster
4 prevention;

5 “(vi) advanced communications tech-
6 nology;

7 “(vii) biotechnology, genomics, and
8 synthetic biology;

9 “(viii) cybersecurity, data storage and
10 data management technologies;

11 “(ix) advanced energy; and

12 “(x) materials science, engineering,
13 and exploration relevant to the other key
14 technology focus areas described in this
15 subparagraph.

16 “(B) REVIEW OF KEY TECHNOLOGY FOCUS
17 AREAS AND SUBSEQUENT LISTS.—

18 “(i) ADDING OR DELETING KEY
19 TECHNOLOGY FOCUS AREAS.—Beginning
20 on the date that is 4 years after the date
21 of enactment of the Endless Frontier Act,
22 and every 4 years thereafter, the Director,
23 acting through the Deputy Director—

1 “(I) shall, in consultation with
2 the Board of Advisors, review the list
3 of key technology focus areas; and

4 “(II) as part of that review, may
5 add or delete key technology focus
6 areas if the competitive threats to the
7 United States have shifted (whether
8 because the United States or other
9 nations have advanced or fallen be-
10 hind in a technological area), subject
11 to clause (ii).

12 “(ii) LIMIT ON KEY TECHNOLOGY
13 FOCUS AREAS.—Not more than 10 key
14 technology focus areas shall be included on
15 the list of key technology focus areas at
16 any time.

17 “(iii) UPDATING FOCUS AREAS AND
18 DISTRIBUTION.—Upon the completion of
19 each review under this subparagraph, the
20 Director shall make the list of key tech-
21 nology focus areas readily available and
22 publish the list in the Federal Register,
23 even if no changes have been made to the
24 prior list.

25 “(3) ACTIVITIES.—

1 “(A) IN GENERAL.—In carrying out the
2 duties and functions of the Directorate, the Di-
3 rector, acting through the Deputy Director,
4 may—

5 “(i) award, grants, cooperative agree-
6 ments, and contracts to—

7 “(I) individual institutions of
8 higher education for work at centers
9 or by individual researchers;

10 “(II) not-for-profit entities; and

11 “(III) consortia that—

12 “(aa) shall include and be
13 led by an institution of higher
14 education, and may include 1 or
15 more additional institutions of
16 higher education;

17 “(bb) may include 1 or more
18 entities described in subclause (I)
19 or (II) and, if determined appro-
20 priate by the Director, for-profit
21 entities, including small busi-
22 nesses; and

23 “(cc) may include 1 or more
24 entities described in subclause (I)
25 or (II) from treaty allies and se-

1 security partners of the United
2 States;

3 “(ii) provide funds to other divisions
4 of the Foundation, including—

5 “(I) to the other directorates of
6 the Foundation to pursue basic ques-
7 tions about natural and physical phe-
8 nomena that could enable advances in
9 the key technology focus areas;

10 “(II) to the Directorate for So-
11 cial, Behavioral, and Economic
12 Sciences to study questions that could
13 affect the design, operation, deploy-
14 ment, or the social and ethical con-
15 sequences of technologies in the key
16 technology focus areas; and

17 “(III) to the Directorate for
18 Education and Human Resources to
19 further the creation of a domestic
20 workforce capable of advancing the
21 key technology focus areas;

22 “(iii) provide funds to other Federal
23 research agencies, including the National
24 Institute of Standards and Technology, for

1 intramural or extramural work in the key
2 technology focus areas;

3 “(iv) make awards under the SBIR
4 and STTR programs (as defined in section
5 9(e) of the Small Business Act (15 U.S.C.
6 638(e)) in the same manner as awards
7 under such programs are made by the Di-
8 rector of the Foundation;

9 “(v) administer prize challenges under
10 section 24 of the Stevenson-Wydler Tech-
11 nology Innovation Act of 1980 (15 U.S.C.
12 3719) in the key technology focus areas, in
13 order to expand public-private partnerships
14 beyond direct research funding; and

15 “(vi) enter into and perform such con-
16 tracts, including cooperative research and
17 development arrangements and grants and
18 cooperative agreements or other trans-
19 actions, as may be necessary in the con-
20 duct of the work of the Directorate and on
21 such terms as the Deputy Director con-
22 siders appropriate, in furtherance of the
23 purposes of this Act.

24 “(B) REPORTS.—Not later than 180 days
25 after the date of enactment of the Endless

1 Frontier Act, the Director shall prepare and
2 submit to the relevant congressional committees
3 a spending plan for the next 5 years for each
4 of the activities described in subparagraph (A),
5 including—

6 “(i) a plan to seek out additional in-
7 vestments from—

8 “(I) certain designated countries;
9 and

10 “(II) if appropriate, private sec-
11 tor entities; and

12 “(ii) the planned activities of the Di-
13 rectorate to secure federally funded science
14 and technology pursuant to section 1746 of
15 the National Defense Authorization Act for
16 Fiscal Year 2020 (Public Law 116–92).

17 “(C) ANNUAL BRIEFING.—Each year, the
18 Director shall formally request a briefing from
19 the Director of the Federal Bureau of Inves-
20 tigation and the Director of the National Coun-
21 terintelligence and Security Center regarding
22 their efforts to preserve the United States’ ad-
23 vantages generated by the activity of the Direc-
24 torate.

1 “(4) INTERAGENCY COOPERATION.—In carrying
2 out this section, the Director and other Federal re-
3 search agencies shall work cooperatively with each
4 other to further the goals of this section in the key
5 technology focus areas. Each year, the Director shall
6 prepare and submit a report to Congress, and shall
7 simultaneously submit the report to the Director of
8 the Office of Science and Technology Policy, describ-
9 ing the interagency cooperation that occurred during
10 the preceding year pursuant to this paragraph, in-
11 cluding a list of—

12 “(A) any funds provided under paragraph
13 (3)(A)(ii) to other divisions of the Foundation;
14 and

15 “(B) any funds provided under paragraph
16 (3)(A)(iii) to other Federal research agencies.

17 “(5) PROVIDING SCHOLARSHIPS, FELLOWSHIPS,
18 AND OTHER STUDENT SUPPORT.—

19 “(A) IN GENERAL.—The Director, acting
20 through the Directorate, shall fund under-
21 graduate scholarships, graduate fellowships and
22 traineeships, and postdoctoral student awards
23 in the key technology focus areas.

1 “(B) IMPLEMENTATION.—The Director
2 may carry out subparagraph (A) by providing
3 funds—

4 “(i) to the Directorate for Education
5 and Human Resources of the Foundation
6 for—

7 “(I) awards directly to students;
8 and

9 “(II) grants or cooperative agree-
10 ments to institutions of higher edu-
11 cation, including those institutions in-
12 volved in operating university tech-
13 nology centers established under para-
14 graph (6); and

15 “(ii) to programs in Federal research
16 agencies that have experience awarding
17 such scholarships, fellowships, traineeships,
18 or postdoctoral awards.

19 “(C) SUPPLEMENT, NOT SUPPLANT.—The
20 Director shall ensure that funds made available
21 under this paragraph shall be used to create ad-
22 ditional support for postsecondary students and
23 shall not displace funding for any other avail-
24 able support.

25 “(6) UNIVERSITY TECHNOLOGY CENTERS.—

1 “(A) IN GENERAL.—From amounts made
2 available to the Directorate, the Director shall,
3 through a competitive application and selection
4 process, award grants to or enter into coopera-
5 tive agreements with institutions of higher edu-
6 cation or consortia described in paragraph
7 (3)(A)(i)(III) to establish university technology
8 centers.

9 “(B) USES OF FUNDS.—

10 “(i) IN GENERAL.—A center estab-
11 lished under a grant or cooperative agree-
12 ment under subparagraph (A)—

13 “(I) shall use support provided
14 under such subparagraph—

15 “(aa) to carry out funda-
16 mental research to advance inno-
17 vation in the key technology
18 focus areas; and

19 “(bb) to further the develop-
20 ment of innovations in the key
21 technology focus areas, includ-
22 ing—

23 “(AA) innovations de-
24 rived from research carried
25 out under item (aa), through

1 such activities as proof-of-
2 concept development and
3 prototyping, in order to re-
4 duce the cost, time, and risk
5 of commercializing new tech-
6 nologies; and

7 “(BB) through the use
8 of public-private partner-
9 ships; and

10 “(II) may use support provided
11 under such subparagraph—

12 “(aa) for the costs of equip-
13 ment, including mid-tier infra-
14 structure, and the purchase of
15 cyberinfrastructure resources, in-
16 cluding computer time; or

17 “(bb) for other activities or
18 costs necessary to accomplish the
19 purposes of this section.

20 “(ii) SUPPORT OF REGIONAL TECH-
21 NOLOGY HUBS.—Each center established
22 under subparagraph (A) may support and
23 participate in, as appropriate, the activities
24 of any regional technology hub designated
25 under section 27(d) of the Stevenson-

1 Wydler Technology Innovation Act of 1980
2 (15 U.S.C. 3722(d)).

3 “(C) REQUIREMENTS.—The Director shall
4 ensure that any institution of higher education
5 or consortium receiving a grant or cooperative
6 agreement under subparagraph (A) has dem-
7 onstrated an ability to advance the goals de-
8 scribed in subsection (b)(1).

9 “(7) MOVING TECHNOLOGY FROM LABORATORY
10 TO MARKET.—

11 “(A) PROGRAM AUTHORIZED.—The Direc-
12 tor shall establish a program in the Directorate
13 to award grants, on a competitive basis, to in-
14 stitutions of higher education or consortia de-
15 scribed in paragraph (3)(A)(i)(III)—

16 “(i) to build capacity at an institution
17 of higher education and in its surrounding
18 region to increase the likelihood that new
19 technologies in the key technology focus
20 areas will succeed in the commercial mar-
21 ket; and

22 “(ii) with the goal of promoting ex-
23 periments with a range of models that in-
24 stitutions of higher education could use
25 to—

1 “(I) enable new technologies to
2 mature to the point where the tech-
3 nologies are more likely to succeed in
4 the commercial market; and

5 “(II) reduce the risks to commer-
6 cial success for new technologies ear-
7 lier in their development.

8 A grant awarded under this subparagraph
9 for a purpose described in clause (i) or (ii)
10 may also enable the institution of higher
11 education or consortium to provide train-
12 ing and support to scientists and engineers
13 who are interested in research and com-
14 mercialization, if the use is included in the
15 proposal submitted under subparagraph
16 (B).

17 “(B) PROPOSALS.—An institution of high-
18 er education or consortium desiring a grant
19 under this paragraph shall submit a proposal to
20 the Director at such time, in such manner, and
21 containing such information as the Director
22 may require. The proposal shall include a de-
23 scription of—

1 “(i) the steps the applicant will take
2 to reduce the risks for commercialization
3 for new technologies;

4 “(ii) why such steps are likely to be
5 effective; and

6 “(iii) how such steps differ from pre-
7 vious efforts to reduce the risks for com-
8 mercialization for new technologies.

9 “(C) USE OF FUNDS.—A recipient of a
10 grant under this paragraph shall use grant
11 funds to reduce the risks for commercialization
12 for new technologies developed on campus,
13 which may include—

14 “(i) creating and funding competitions
15 to allow entrepreneurial ideas from institu-
16 tions of higher education to illustrate their
17 commercialization potential;

18 “(ii) facilitating mentorships between
19 local and national business leaders and po-
20 tential entrepreneurs to encourage success-
21 ful commercialization;

22 “(iii) creating and funding for-profit
23 or not-for-profit entities that could enable
24 researchers at institutions of higher edu-
25 cation to further develop new technology

1 prior to seeking commercial financing,
2 through patient funding, advice, staff sup-
3 port, or other means;

4 “(iv) providing off-campus facilities
5 for start-up companies where technology
6 maturation could occur; and

7 “(v) revising institution policies to ac-
8 complish the goals of this paragraph.

9 “(8) TEST BEDS.—

10 “(A) PROGRAM AUTHORIZED.—The Direc-
11 tor, acting through the Deputy Director, shall
12 establish a program in the Directorate to award
13 grants, on a competitive basis, to institutions of
14 higher education or consortia described in para-
15 graph (3)(A)(i)(III) to establish test beds and
16 fabrication facilities to advance the operation,
17 integration and, as appropriate, manufacturing
18 of new, innovative technologies in the key tech-
19 nology focus areas, which may include hardware
20 or software. The goal of such test beds and fa-
21 cilities shall be to accelerate the movement of
22 innovative technologies into the commercial
23 market through existing and new companies.

1 “(B) PROPOSALS.—A proposal submitted
2 under this paragraph shall, at a minimum, de-
3 scribe—

4 “(i)(I) the 1 or more technologies that
5 will be the focus of the test bed or fabrica-
6 tion facility;

7 “(II) the goals of the work to be done
8 at the test bed or facility; and

9 “(III) the expected schedule for com-
10 pleting that work;

11 “(ii) how the applicant will assemble a
12 workforce with the skills needed to operate
13 the test bed or facility;

14 “(iii) how the applicant will ensure
15 that work in the test bed or facility will
16 contribute to the commercial viability of
17 any technologies, which may include col-
18 laboration and funding from industry part-
19 ners;

20 “(iv) how the applicant will encourage
21 the participation of entrepreneurs and the
22 development of new businesses; and

23 “(v) how the test bed or facility will
24 operate after Federal funding has ended.

1 “(C) AWARDS.—Grants made under this
2 paragraph—

3 “(i) shall be for 5 years, with the pos-
4 sibility of one 3-year extension; and

5 “(ii) may be used for the purchase of
6 equipment, the support of graduate stu-
7 dents and postdoctoral researchers, and
8 the salaries of staff.

9 “(D) REQUIREMENTS.—As a condition of
10 receiving a grant under this paragraph, an in-
11 stitution of higher education or consortium
12 shall publish and share with the public the re-
13 sults of the work conducted under this para-
14 graph.

15 “(9) INAPPLICABILITY.—Section 5(e)(1) shall
16 not apply to grants, contracts, or other arrange-
17 ments made under this section.

18 “(d) BOARD OF ADVISORS.—

19 “(1) IN GENERAL.—There is established in the
20 Foundation a Board of Advisors for the Directorate
21 (referred to in this section as the ‘Board of Advi-
22 sors’), which shall provide advice to the Deputy Di-
23 rector pursuant to this subsection. The Board of Ad-
24 visors shall not have any decision-making authority.

25 “(2) MEMBERSHIP.—

1 “(A) COMPOSITION.—The Board of Advi-
2 sors shall be comprised of 12 members rep-
3 resenting scientific leaders and experts from in-
4 dustry and academia, of whom—

5 “(i) 2 shall be appointed by the ma-
6 jority leader of the Senate;

7 “(ii) 2 shall be appointed by the mi-
8 nority leader of the Senate;

9 “(iii) 2 shall be appointed by the
10 Speaker of the House of Representatives;

11 “(iv) 2 shall be appointed by the mi-
12 nority leader of the House of Representa-
13 tives; and

14 “(v) 4 shall be appointed by the Di-
15 rector.

16 “(B) OPPORTUNITY FOR INPUT.—Before
17 appointing any member under subparagraph
18 (A), the appointing authority shall provide an
19 opportunity for the National Academies of
20 Sciences, Engineering, and Medicine and other
21 entities to provide advice regarding potential
22 appointees.

23 “(C) QUALIFICATIONS.—

24 “(i) IN GENERAL.—Each member ap-
25 pointed under subparagraph (A) shall—

1 “(I) have extensive experience in
2 a field related to the work of the Di-
3 rectorate or other expertise relevant to
4 developing technology roadmaps; and

5 “(II) have, or be able to obtain
6 within a reasonable period of time, a
7 security clearance appropriate for the
8 work of the Board of Advisors.

9 “(ii) EXPEDITED SECURITY CLEAR-
10 ANCES.—The process of obtaining a secu-
11 rity clearance under clause (i)(II) may be
12 expedited by the head of the appropriate
13 Federal agency to enable the Board to re-
14 ceive classified briefings on the current and
15 future technological capacity of other Na-
16 tions, and on the military implications of
17 civilian technologies.

18 “(D) DATE.—The appointments of the
19 members of the Board of Advisors shall be
20 made not later than 90 days after the date of
21 enactment of the Endless Frontier Act.

22 “(3) PERIOD OF APPOINTMENT; VACANCIES.—

23 “(A) IN GENERAL.—A member of the
24 Board of Advisors shall be appointed for a 3-
25 year term, except that the Deputy Director

1 shall adjust the terms for the first members of
2 the Board of Advisors so that, within each ap-
3 pointment category described in clauses (i)
4 through (v) of paragraph (2)(A), the terms ex-
5 pire on a staggered basis.

6 “(B) TERM LIMITS.—A member of the
7 Board of Advisors shall not serve for more than
8 2 full consecutive terms.

9 “(C) VACANCIES.—Any vacancy in the
10 Board of Advisors—

11 “(i) shall not affect the powers of the
12 Board of Advisors; and

13 “(ii) shall be filled in the same man-
14 ner as the original appointment.

15 “(4) CHAIRPERSON.—The members of the
16 Board of Advisors shall elect 1 member to serve as
17 the chairperson of the Board of Advisors.

18 “(5) MEETINGS.—

19 “(A) INITIAL MEETING.—Not later than
20 180 days after the date of enactment of the
21 Endless Frontier Act, the Board of Advisors
22 shall hold the first meeting of the Board of Ad-
23 visors.

24 “(B) ADDITIONAL MEETINGS.—After the
25 first meeting of the Board of Advisors, the

1 Board of Advisors shall meet upon the call of
2 the chairperson or of the Director, and at least
3 once every 180 days for the duration of the
4 Board of Advisors.

5 “(C) MEETING WITH THE NATIONAL
6 SCIENCE BOARD.—The Board of Advisors shall
7 hold a joint meeting with the National Science
8 Board on at least an annual basis, on a date
9 mutually selected by the Chairperson of the
10 Board of Advisors and the Chairman of the Na-
11 tional Science Board.

12 “(D) QUORUM.—A majority of the mem-
13 bers of the Board of Advisors shall constitute a
14 quorum, but a lesser number of members may
15 hold hearings.

16 “(6) DUTIES OF BOARD OF ADVISORS.—

17 “(A) IN GENERAL.—The Board of Advi-
18 sors shall provide advice—

19 “(i) to the Deputy Director on pro-
20 grams that could best be carried out to ac-
21 complish the purposes of this section;

22 “(ii) to the Deputy Director to inform
23 the reviews of key technology focus areas
24 required under subsection (c)(2)(B); and

1 “(iii) on other issues relating to the
2 purposes and responsibilities of the Direc-
3 torate, as requested by the Deputy Direc-
4 tor.

5 “(B) NO ROLE IN AWARDING GRANTS,
6 CONTRACTS, OR COOPERATIVE AGREEMENTS.—
7 The Board of Advisors shall not provide advice
8 on or otherwise help determine what entities
9 shall receive grants, contracts, or cooperative
10 agreements under this Act.

11 “(7) POWERS OF BOARD OF ADVISORS.—

12 “(A) HEARINGS.—The Board of Advisors
13 may hold public or private hearings, sit and act
14 at such times and places, take such testimony
15 and receive such evidence (including classified
16 testimony and evidence), and administer such
17 oaths as may be necessary to carry out the
18 functions of the Board of Advisors under para-
19 graph (6).

20 “(B) INFORMATION FROM FEDERAL AGEN-
21 CIES.—

22 “(i) IN GENERAL.—Each Federal de-
23 partment or agency shall, in accordance
24 with applicable procedures for the handling
25 of classified information, provide reason-

1 able access to documents, statistical data,
2 and other such information that the Dep-
3 uty Director, in consultation with the
4 chairperson of the Board of Advisors, de-
5 termines necessary to carry out its func-
6 tions under paragraph (6).

7 “(ii) OBTAINING CLASSIFIED INFOR-
8 MATION.—If the Board of Advisors, acting
9 through the chairperson, seeks classified
10 information from a Federal department or
11 agency, the Deputy Director shall submit a
12 written request to the head of the Federal
13 department or agency for access to classi-
14 fied documents and statistical data, and
15 other classified information described in
16 clause (i), that is under the control of such
17 agency.

18 “(C) FINANCIAL DISCLOSURE REPORTS.—
19 Each member of the Board of Advisors shall be
20 required to file a financial disclosure report
21 under title I of the Ethics in Government Act
22 of 1978, except that such reports shall be held
23 confidential and exempt from any law otherwise
24 requiring their public disclosure.

1 “(8) BOARD OF ADVISORS PERSONNEL AND
2 OPERATIONAL MATTERS.—

3 “(A) COMPENSATION OF MEMBERS.—

4 “(i) IN GENERAL.—A member of the
5 Board of Advisors shall be compensated at
6 a rate equal to the daily equivalent of the
7 annual rate of basic pay prescribed for
8 level IV of the Executive Schedule under
9 section 5315 of title 5, United States
10 Code, for each day (including travel time)
11 during which the member is engaged in the
12 performance of the duties of the Board of
13 Advisors.

14 “(ii) NO FEDERAL EMPLOYEE MEM-
15 BERS.—No member of the Board of Advi-
16 sors may be an officer or employee of the
17 United States during the member’s term
18 on the Board of Advisors.

19 “(B) TRAVEL EXPENSES.—A member of
20 the Board of Advisors shall be allowed travel
21 expenses, including per diem in lieu of subsist-
22 ence, at rates authorized for employees of agen-
23 cies under subchapter I of chapter 57 of title 5,
24 United States Code, while away from their

1 home or regular places of business in the per-
2 formance of services for the Board of Advisors.

3 “(C) STAFF.—The Deputy Director, in
4 consultation with the chairperson of the Board
5 of Advisors, shall assign an employee of the
6 Foundation to serve as an executive director for
7 the Board of Advisors.

8 “(D) GOVERNMENT EMPLOYEES.—

9 “(i) IN GENERAL.—Any Federal Gov-
10 ernment employee may be detailed to the
11 Board of Advisors without reimbursement,
12 and such detail shall be without interrup-
13 tion or loss of civil service status or privi-
14 lege.

15 “(ii) EMPLOYEES OF THE LEGISLA-
16 TIVE BRANCH.—The Deputy Director shall
17 establish procedures and policies to enable
18 an employee of an office, agency, or other
19 entity in the legislative branch of the Gov-
20 ernment to support the activities of the
21 Board of Advisors.

22 “(E) PROCUREMENT OF TEMPORARY AND
23 INTERMITTENT SERVICES.—The chairperson of
24 the Board of Advisors, with approval from the
25 Deputy Director, may procure temporary and

1 intermittent services under section 3109(b) of
2 title 5, United States Code, at rates for individ-
3 uals which do not exceed the daily equivalent of
4 the annual rate of basic pay prescribed for level
5 V of the Executive Schedule under section 5316
6 of that title.

7 “(F) ASSISTANCE FROM FEDERAL AGEN-
8 CIES.—A Federal department or agency may
9 provide to the Board of Advisors such services,
10 funds, facilities, staff, and other support serv-
11 ices as the department or agency may deter-
12 mine advisable and as may be authorized by
13 law.

14 “(9) PERMANENT BOARD.—Section 14 of the
15 Federal Advisory Committee Act (5 U.S.C. App.)
16 shall not apply to the Board of Advisors.

17 “(e) AREAS OF FUNDING SUPPORT.—Subject to the
18 availability of funds under subsection (f), the Director
19 shall, for each fiscal year, use—

20 “(1) not less than 35 percent of funds provided
21 to the Directorate for such year to carry out sub-
22 section (c)(6);

23 “(2) not less than 15 percent of such funds to
24 carry out subsection (c)(5) with the goal of award-
25 ing, across the key technology focus areas—

1 “(A) not fewer than 1,000 post-doctorate
2 fellowships;

3 “(B) not fewer than 2,000 graduate fellow-
4 ships and traineeships;

5 “(C) not fewer than 1,000 undergraduate
6 scholarships; and

7 “(D) if funds remain after carrying out
8 subparagraphs (A) through (C), grants to insti-
9 tutions of higher education to enable the insti-
10 tutions to fund the development and establish-
11 ment of new or specialized courses of education
12 for graduate, undergraduate, or technical col-
13 lege students;

14 “(3) not less than 5 percent of such funds to
15 carry out subsection (c)(7);

16 “(4) not less than 10 percent of such funds to
17 carry out subsection (c)(8) by establishing and
18 equipping test beds and fabrication facilities; and

19 “(5) not less than 15 percent of such funds to
20 carry out research and related activities pursuant to
21 subclauses (I) and (II) of subsection (c)(3)(A)(ii).

22 “(f) AUTHORIZATION OF APPROPRIATIONS.—

23 “(1) IN GENERAL.—There are authorized to be
24 appropriated for the Directorate, in addition to any
25 other funds made available to the Directorate, a

1 total of \$100,000,000,000 for fiscal years 2021
2 through 2025, of which—

3 “(A) \$2,000,000,000 is authorized for fis-
4 cal year 2021;

5 “(B) \$8,000,000,000 is authorized for fis-
6 cal year 2022;

7 “(C) \$20,000,000,000 is authorized for fis-
8 cal year 2023;

9 “(D) \$35,000,000,000 is authorized for
10 fiscal year 2024; and

11 “(E) \$35,000,000,000 is authorized for
12 fiscal year 2025.

13 “(2) APPROPRIATIONS LIMITATIONS.—

14 “(A) HOLD HARMLESS.—No funds shall be
15 appropriated to the Directorate or to carry out
16 this section for any fiscal year in which the
17 total amount appropriated to the Foundation
18 (not including amounts appropriated for the Di-
19 rectorate) is less than the total amount appro-
20 priated to the Foundation (not including such
21 amounts), adjusted by the rate of inflation, for
22 the previous fiscal year.

23 “(B) NO TRANSFER OF FUNDS.—The Di-
24 rector shall not transfer any funds appropriated

1 to any other directorate or office of the Foun-
2 dation to the Directorate.”.

3 (d) ANNUAL REPORT ON UNFUNDED PRIORITIES.—

4 (1) ANNUAL REPORT.—Not later than 10 days
5 after the date on which the budget of the President
6 for a fiscal year is submitted to Congress pursuant
7 to section 1105 of title 31, United States Code, the
8 Director shall submit to the President and to Con-
9 gress a report on the unfunded priorities of the Na-
10 tional Science and Technology Foundation.

11 (2) ELEMENTS.—Each report submitted under
12 paragraph (1) shall provide—

13 (A) for each directorate of the National
14 Science Foundation for the most recent, fully
15 completed fiscal year—

16 (i) the proposal success rate;

17 (ii) the percentage of proposals that
18 were not funded and that met the criteria
19 for funding; and

20 (iii) the most promising research
21 areas covered by proposals described in
22 clause (ii); and

23 (B) a list, in order of priority, of the next
24 activities that should be undertaken in the

1 Major Research Equipment and Facilities Con-
2 struction account.

3 **SEC. 4. REGIONAL TECHNOLOGY HUB PROGRAM.**

4 (a) DEFINITIONS.—

5 (1) KEY TECHNOLOGY FOCUS AREAS.—Sub-
6 section (a) of section 27 of the Stevenson-Wydler
7 Technology Innovation Act of 1980 (15 U.S.C.
8 3722) is amended—

9 (A) by redesignating paragraphs (2)
10 through (4) as paragraphs (3) through (5), re-
11 spectively; and

12 (B) by inserting after paragraph (1) the
13 following:

14 “(2) KEY TECHNOLOGY FOCUS AREAS.—The
15 term ‘key technology focus areas’ means the areas
16 included on the most recent list under section
17 8A(c)(2) of the Act of May 10, 1950 (64 Stat. 49,
18 chapter 171; 42 U.S.C. 1861 et seq.).”.

19 (2) VENTURE DEVELOPMENT ORGANIZA-
20 TIONS.—Paragraph (5) of such subsection, as reded-
21 icated by paragraph (1) of this subsection, is
22 amended by striking “purposes of” and all that fol-
23 lows through the period at the end and inserting the
24 following: “purposes of—

1 “(A) accelerating the commercialization of
2 research;

3 “(B) strengthening the competitive posi-
4 tion of industry through the development, com-
5 mercial adoption, or deployment of technology;
6 and

7 “(C) providing financial grants, loans, or
8 direct financial investment to commercialize
9 technology.”.

10 (b) DESIGNATION OF AND SUPPORT FOR REGIONAL
11 TECHNOLOGY HUBS AS PART OF REGIONAL INNOVATION
12 PROGRAM OF DEPARTMENT OF COMMERCE.—

13 (1) IN GENERAL.—Such section is amended—

14 (A) by redesignating subsections (d)
15 through (h) as subsections (e) through (i), re-
16 spectively; and

17 (B) by inserting after subsection (c) the
18 following:

19 “(d) DESIGNATION OF AND GRANTS IN SUPPORT OF
20 REGIONAL TECHNOLOGY HUBS.—

21 “(1) PROGRAM REQUIRED.—

22 “(A) IN GENERAL.—As part of the pro-
23 gram established under subsection (b), the Sec-
24 retary shall carry out a program—

1 “(i) to designate eligible consortia as
2 regional technology hubs that create the
3 conditions, within a region, to facilitate ac-
4 tivities that—

5 “(I) enable United States leader-
6 ship in a key technology focus area,
7 complementing the Federal research
8 and development investments under
9 section 8A of the Act of May 10,
10 1950 (64 Stat. 149, chapter 171; 42
11 U.S.C. 1861 et seq.); and

12 “(II) support regional economic
13 development that diffuses innovation
14 capacity around the United States,
15 enabling better broad-based growth
16 and competitiveness in key technology
17 focus areas; and

18 “(ii) to support regional technology
19 hubs designated under clause (i).

20 “(B) ELIGIBLE CONSORTIA.—For purposes
21 of this section, an eligible consortium is a con-
22 sortium that—

23 “(i) includes—

24 “(I) an institution of higher edu-
25 cation;

1 “(II) a local or Tribal govern-
2 ment or other political subdivision of
3 a State;

4 “(III) a government of a State or
5 the economic development representa-
6 tive of a State; and

7 “(IV) an economic development
8 organization or similar entity that is
9 focused primarily on improving
10 science, technology, innovation, or en-
11 trepreneurship; and

12 “(ii) may include 1 or more—

13 “(I) nonprofit entities with rel-
14 evant expertise;

15 “(II) venture development orga-
16 nizations;

17 “(III) financial institutions;

18 “(IV) educational institutions, in-
19 cluding career and technical education
20 schools;

21 “(V) workforce training organiza-
22 tions;

23 “(VI) industry associations;

24 “(VII) firms in the key tech-
25 nology focus area;

1 “(VIII) Federal laboratories;

2 “(IX) Centers (as defined in sec-
3 tion 25(a) of the National Institute of
4 Standards and Technology Act (15
5 U.S.C. 278k(a));

6 “(X) Manufacturing USA insti-
7 tutes (as described in section 34(d) of
8 the National Institute of Standards
9 and Technology Act (15 U.S.C.
10 278s(d))); and

11 “(XI) institutions receiving an
12 award under paragraph (6) or (7) of
13 section 8A(c) of the Act of May 10,
14 1950 (64 Stat. 49, chapter 171; 42
15 U.S.C. 1861 et seq.).

16 “(C) ADMINISTRATION.—The Secretary
17 shall carry out this subsection through the As-
18 sistant Secretary of Commerce for Economic
19 Development and the Under Secretary of Com-
20 merce for Standards and Technology, jointly.

21 “(2) DESIGNATION OF REGIONAL TECHNOLOGY
22 HUBS.—

23 “(A) IN GENERAL.—The Secretary shall
24 use a competitive process for the designation of

1 regional technology hubs under paragraph
2 (1)(A)(i).

3 “(B) NUMBER OF REGIONAL TECHNOLOGY
4 HUBS.—During the 5-year period beginning on
5 the date of the enactment of the Endless Fron-
6 tier Act, the Secretary shall designate not fewer
7 than 10 and not more than 15 eligible consortia
8 as regional technology hubs under paragraph
9 (1)(A)(i).

10 “(C) GEOGRAPHIC DISTRIBUTION.—In
11 conducting the competitive process under sub-
12 paragraph (A), the Secretary shall ensure geo-
13 graphic distribution in the designation of re-
14 gional technology hubs—

15 “(i) aiming to designate regional tech-
16 nology hubs in as many regions of the
17 United States as possible; and

18 “(ii) focusing on localities that have
19 clear potential and relevant assets for de-
20 veloping a key technology focus area but
21 have not yet become leading technology
22 centers.

23 “(3) GRANTS.—

24 “(A) IN GENERAL.—The Secretary shall
25 carry out clause (ii) of paragraph (1)(A)

1 through the award of grants to eligible con-
2 sortia designated under clause (i) of such para-
3 graph.

4 “(B) TERM.—Each grant awarded under
5 subparagraph (A) shall be for a period of 5
6 years, but may be renewed once for an addi-
7 tional period of 5 years.

8 “(C) MATCHING REQUIRED.—The total
9 Federal financial assistance awarded in a given
10 year to an eligible consortium in support of the
11 eligible consortium’s operation as a regional
12 technology hub under this subsection shall not
13 exceed amounts as follows:

14 “(i) In fiscal year 2021, 90 percent of
15 the total funding of the regional technology
16 hub in that fiscal year.

17 “(ii) In fiscal year 2022, 85 percent
18 of the total funding of the regional tech-
19 nology hub in that fiscal year.

20 “(iii) In fiscal year 2023, 80 percent
21 of the total funding of the regional tech-
22 nology hub in that fiscal year.

23 “(iv) In fiscal year 2024 and in each
24 fiscal year thereafter, 75 percent of the

1 total funding of the regional technology
2 hub in that fiscal year.

3 “(D) USE OF GRANT FUNDS.—The recipi-
4 ent of a grant awarded under subparagraph (A)
5 shall use the grant for multiple activities deter-
6 mined appropriate by the Secretary, includ-
7 ing—

8 “(i) the permissible activities set forth
9 under subsection (c)(2); and

10 “(ii) activities in support of key tech-
11 nology focus areas—

12 “(I) to develop the region’s
13 skilled workforce through the training
14 and retraining of workers and align-
15 ment of career technical training and
16 educational programs in the region’s
17 elementary and secondary schools and
18 institutions of higher education;

19 “(II) to develop regional strate-
20 gies for infrastructure improvements
21 and site development in support of the
22 regional technology hub’s plans and
23 programs;

24 “(III) to support business activ-
25 ity that develops the domestic supply

1 chain and encourages the creation of
2 new business entities;

3 “(IV) to attract new private,
4 public, and philanthropic investment
5 in the region for developing innovation
6 capacity, including establishing re-
7 gional venture and loan funds for fi-
8 nancing technology commercialization,
9 new business formation, and business
10 expansions;

11 “(V) to further the development
12 of innovations in the key technology
13 focus areas, including innovations de-
14 rived from research conducted at in-
15 stitutions of higher education or other
16 research entities, including research
17 conducted by 1 or more university
18 technology centers established under
19 section 8A(c)(6) of the Act of May 10,
20 1950 (64 Stat. 49, chapter 171; 42
21 U.S.C. 1861 et seq.), through activi-
22 ties that may include—

23 “(aa) proof-of-concept devel-
24 opment and prototyping;

1 “(bb) public-private partner-
2 ships in order to reduce the cost,
3 time, and risk of commercializing
4 new technologies;

5 “(cc) creating and funding
6 competitions to allow entrepre-
7 neurial ideas from institutions of
8 higher education to illustrate
9 their commercialization potential;

10 “(dd) facilitating
11 mentorships between local and
12 national business leaders and po-
13 tential entrepreneurs to encour-
14 age successful commercialization;

15 “(ee) creating and funding
16 for-profit or not-for-profit entities
17 that could enable researchers at
18 institutions of higher education
19 and other research entities to
20 further develop new technology
21 prior to seeking commercial fi-
22 nancing, through patient funding,
23 advice, staff support, or other
24 means; and

1 “(ff) providing facilities for
2 start-up companies where tech-
3 nology maturation could occur;
4 and

5 “(VI) to carry out such other ac-
6 tivities as the Secretary considers ap-
7 propriate to improve United States
8 competitiveness and regional economic
9 development to support a key tech-
10 nology focus area and that would fur-
11 ther the purposes of the Endless
12 Frontiers Act.

13 “(4) APPLICATIONS.—

14 “(A) IN GENERAL.—An eligible consortium
15 seeking designation as a regional technology
16 hub under clause (i) of paragraph (1)(A) and
17 support under clause (ii) of such paragraph
18 shall submit to the Secretary an application
19 therefor at such time, in such manner, and con-
20 taining such information as the Secretary may
21 specify.

22 “(B) CONSULTATION WITH NATIONAL
23 SCIENCE FOUNDATION UNIVERSITY TECH-
24 NOLOGY CENTERS.—In preparing an applica-
25 tion for submittal under subparagraph (A), an

1 applicant shall, to the extent practicable, con-
2 sult with one or more university technology cen-
3 ters established under section 8A(c)(6) of the
4 Act of May 10, 1950 (64 Stat. 49, chapter 171;
5 42 U.S.C. 1861 et seq.) that are either geo-
6 graphically relevant or are conducting research
7 on relevant key technology focus areas.

8 “(5) CONSIDERATIONS FOR DESIGNATION AND
9 GRANT AWARDS.—In selecting an eligible consortium
10 that submitted an application under paragraph
11 (4)(A) for designation and support under paragraph
12 (1)(A), the Secretary shall consider, at a minimum,
13 the following:

14 “(A) The potential of the eligible consor-
15 tium to advance the development of new tech-
16 nologies in a key technology focus area.

17 “(B) The likelihood of positive regional
18 economic effect, including increasing the num-
19 ber of high wage jobs, and creating new eco-
20 nomic opportunities for economically disadvan-
21 taged populations.

22 “(C) How the eligible consortium plans to
23 integrate with and leverage the resources of one
24 or more university technology centers estab-
25 lished under section 8A(c)(6) of the Act of May

1 10, 1950 (64 Stat. 49, chapter 171; 42 U.S.C.
2 1861 et seq.) in a related key technology focus
3 area.

4 “(D) How the eligible consortium will en-
5 gage with the private sector, including small-
6 and medium-sized enterprises to commercialize
7 new technologies and develop new supply chains
8 in the United States in a key technology focus
9 area.

10 “(E) How the eligible consortium will
11 carry out workforce development and skills ac-
12 quisition programming, including through the
13 use of apprenticeships, mentorships, and other
14 related activities authorized by the Secretary, to
15 support the development of a key technology
16 focus area.

17 “(F) How the eligible consortium will im-
18 prove science, technology, engineering, and
19 mathematics education programs in the identi-
20 fied region in elementary and secondary school
21 and higher education institutions located in the
22 identified region to support the development of
23 a key technology focus area.

24 “(G) How the eligible consortium plans to
25 develop partnerships with venture development

1 organizations and sources of private investment
2 in support of private sector activity, including
3 launching new or expanding existing companies,
4 in a key technology focus area.

5 “(H) How the eligible consortium plans to
6 organize the activities of regional partners in
7 the public, private, and philanthropic sectors in
8 support of the proposed regional technology
9 hub, including the development of necessary in-
10 frastructure improvements and site preparation.

11 “(I) How the eligible consortium plans to
12 address economic inclusion, including ensuring
13 that skill development, entrepreneurial assist-
14 ance, and other activities focus on economically
15 disadvantaged populations.

16 “(6) COORDINATION WITH NATIONAL INSTI-
17 TUTE OF STANDARDS AND TECHNOLOGY PRO-
18 GRAMS.—

19 “(A) DEFINITIONS.—In this paragraph:

20 “(i) MANUFACTURING EXTENSION
21 CENTER.—The term ‘manufacturing exten-
22 sion center’ has the meaning given the
23 term ‘Center’ in section 25(a) of the Na-
24 tional Institute of Standards and Tech-
25 nology Act (15 U.S.C. 278k(a)).

1 “(ii) MANUFACTURING USA INSTI-
2 TUTE.—The term ‘Manufacturing USA in-
3 stitute’ means a Manufacturing USA insti-
4 tute described in section 34(d) of the Na-
5 tional Institute of Standards and Tech-
6 nology Act (15 U.S.C. 278s(d)).

7 “(B) COORDINATION REQUIRED.—The
8 Secretary shall coordinate the activities of re-
9 gional technology hubs designated under this
10 subsection, the Hollings Manufacturing Exten-
11 sion Partnership, and the Manufacturing USA
12 Program with each other to the degree that
13 doing so does not diminish the effectiveness of
14 the ongoing activities of a manufacturing exten-
15 sion center or a Manufacturing USA institute.

16 “(C) CONDITION OF SUPPORT.—In order
17 to coordinate activities under subparagraph
18 (B), the Secretary may condition the award of
19 a grant or support under this subsection or sec-
20 tion 25 or 34 of the National Institute of
21 Standards and Technology Act (15 U.S.C. 278k
22 and 278s) upon submittal to the coordination
23 efforts of the Secretary under subparagraph
24 (B) of this paragraph.

1 “(D) ELEMENTS.—Coordination by the
2 Secretary under subparagraph (B) may include
3 the following:

4 “(i) The alignment of activities of the
5 Hollings Manufacturing Extension Part-
6 nership with the activities of regional tech-
7 nology hubs designated under this sub-
8 section, if applicable.

9 “(ii) The alignment of activities of the
10 Manufacturing USA Program and the
11 Manufacturing USA institutes with the ac-
12 tivities of regional technology hubs des-
13 ignated under this subsection, if applicable.

14 “(7) INTERAGENCY COLLABORATION.—In as-
15 sisting regional technology hubs designated under
16 paragraph (1)(A)(i), the Secretary—

17 “(A) shall collaborate with Federal depart-
18 ments and agencies whose missions contribute
19 to the goals of the regional technology hub;

20 “(B) may accept funds from other Federal
21 agencies to support grants and activities under
22 this subsection; and

23 “(C) may establish interagency agreements
24 with other Federal departments or agencies to
25 provide preferential consideration for financial

1 or technical assistance to a regional technology
2 hub designated under this subsection if all ap-
3 plicable requirements for the financial or tech-
4 nical assistance are met.

5 “(8) PERFORMANCE MEASUREMENT, TRANS-
6 PARENCY, AND ACCOUNTABILITY.—

7 “(A) METRICS, STANDARDS, AND ASSESS-
8 MENT.—For each grant awarded under para-
9 graph (3) for a regional technology hub, the
10 Secretary shall—

11 “(i) develop metrics to assess the ef-
12 fectiveness of the activities funded in mak-
13 ing progress toward the purposes set forth
14 under paragraph (1)(A);

15 “(ii) establish standards for the per-
16 formance of the regional technology hub
17 that are based on the metrics developed
18 under clause (i); and

19 “(iii) 2 years after the first initial
20 award under paragraph (3) and each year
21 thereafter until Federal financial assist-
22 ance under this subsection the regional
23 technology hub is discontinued, conduct an
24 assessment of the regional technology hub
25 to confirm whether the performance of the

1 regional technology hub is meeting the
2 standards for performance established
3 under clause (ii).

4 “(B) ANNUAL REPORT.—Not less fre-
5 quently than once each year, the Secretary shall
6 submit to the Committee on Commerce,
7 Science, and Transportation of the Senate, the
8 Committee on Appropriations of the Senate, the
9 Committee on Science, Space, and Technology
10 of the House of Representatives, and the Com-
11 mittee on Appropriations of the House of Rep-
12 resentatives an annual report on the results of
13 the assessments conducted by the Secretary
14 under subparagraph (A)(iii) during the period
15 covered by the report.”

16 (2) INITIAL DESIGNATIONS AND AWARDS.—

17 (A) COMPETITION REQUIRED.—Not later
18 than 180 days after the date of the enactment
19 of this Act, the Secretary of Commerce shall
20 commence a competition under paragraph
21 (2)(A) of section 27(d) of the Stevenson-Wydler
22 Technology Innovation Act of 1980, as added
23 by paragraph (1).

24 (B) DESIGNATION AND AWARD.—Not later
25 than 1 year after the date of the enactment of

1 this Act, if the Secretary has received at least
2 1 application under paragraph (4) of such sec-
3 tion from an eligible consortium whom the Sec-
4 retary considers suitable for designation under
5 paragraph (1)(A)(i) of such section, the Sec-
6 retary shall—

7 (i) designate at least 1 regional tech-
8 nology hub under paragraph (1)(A)(i) of
9 such section; and

10 (ii) award a grant under paragraph
11 (3)(A) of such section to each regional
12 technology hub designated under clause (i)
13 of this subparagraph.

14 (c) AUTHORIZATION OF APPROPRIATIONS.—Sub-
15 section (i) of such section, as redesignated by subsection
16 (c)(1)(A) of this section, is amended—

17 (1) by striking “From amounts” and inserting
18 the following:

19 “(1) IN GENERAL.—From amounts”;

20 (2) in paragraph (1), as redesignated by para-
21 graph (1) of this subsection, by striking “this sec-
22 tion” and inserting “the provisions of this section
23 other than subsection (d)”;

24 (3) by adding at the end the following:

1 “(2) REGIONAL TECHNOLOGY HUBS.—There is
2 authorized to be appropriated to the Secretary to
3 carry out subsection (d) \$10,000,000,000 for the pe-
4 riod of fiscal year 2021 through 2025.”.

5 **SEC. 5. STRATEGY AND REPORT ON ECONOMIC SECURITY,**
6 **SCIENCE, RESEARCH, AND INNOVATION TO**
7 **SUPPORT THE NATIONAL SECURITY STRAT-**
8 **EGY.**

9 (a) DEFINITIONS.—In this section:

10 (1) APPROPRIATE COMMITTEES OF CON-
11 GRESS.—The term “appropriate committees of Con-
12 gress” means—

13 (A) the Committee on Appropriations, the
14 Committee on Armed Services, the Committee
15 on Banking, Housing, and Urban Affairs, the
16 Committee on Commerce, Science, and Trans-
17 portation, the Committee on Energy and Nat-
18 ural Resources, the Committee on Finance, the
19 Committee on Foreign Relations, and the Select
20 Committee on Intelligence of the Senate; and

21 (B) the Committee on Appropriations, the
22 Committee on Armed Services, the Committee
23 on Energy and Commerce, the Committee on
24 Financial Services, the Committee on Foreign
25 Affairs, the Committee on Ways and Means,

1 and the Permanent Select Committee on Intel-
2 ligence of the House of Representatives.

3 (2) KEY TECHNOLOGY FOCUS AREA.—The term
4 “key technology focus area” means an area included
5 on the most recent list under section 8A(c)(2) of the
6 Act of May 10, 1950 (64 Stat. 49, chapter 171; 42
7 U.S.C. 1861 et seq.).

8 (3) NATIONAL SECURITY STRATEGY.—The term
9 “national security strategy” means the national se-
10 curity strategy required by section 108 of the Na-
11 tional Security Act of 1947 (50 U.S.C. 3043).

12 (b) STRATEGY AND REPORT.—

13 (1) IN GENERAL.—In 2021 and in each year
14 thereafter before the applicable date set forth under
15 paragraph (2), the Director of the Office of Science
16 and Technology Policy, in coordination with the Di-
17 rector of the National Economic Council, the Direc-
18 tor of the National Science Foundation, the Sec-
19 retary of Commerce, the National Security Council,
20 and the heads of other relevant Federal agencies,
21 shall—

22 (A) review such strategy, programs, and
23 resources as the Director of the Office of
24 Science and Technology Policy determines per-
25 tain to United States national competitiveness

1 in science, research, and innovation to support
2 the national security strategy;

3 (B) develop a strategy for the Federal
4 Government to improve the national competi-
5 tiveness of the United States in science, re-
6 search, and innovation to support the national
7 security strategy; and

8 (C) submit to the appropriate committees
9 of Congress—

10 (i) a report on the findings of the Di-
11 rector with respect to the review conducted
12 under paragraph (1); and

13 (ii) the strategy developed or revised
14 under paragraph (2).

15 (2) APPLICABLE DATES.—In each year, the ap-
16 plicable date set forth under this paragraph is as fol-
17 lows:

18 (A) In 2021, December 31, 2021.

19 (B) In 2022 and every year thereafter—

20 (i) in any year in which a new Presi-
21 dent is inaugurated, October 1 of that
22 year; and

23 (ii) in any other year, the date that is
24 90 days after the date of the transmission

1 to Congress in that year of the national se-
2 curity strategy.

3 (c) ELEMENTS.—

4 (1) REPORT.—Each report submitted under
5 subsection (b)(1)(C)(i) shall include the following:

6 (A) An assessment of public and private
7 investment in civilian and military science and
8 technology and its implications for the
9 geostrategic position and national security of
10 the United States.

11 (B) A description of the prioritized eco-
12 nomic security interests and objectives of the
13 United States relating to science, research, and
14 innovation and an assessment of how invest-
15 ment in civilian and military science and tech-
16 nology can advance those objectives.

17 (C) An assessment of how regional efforts
18 are contributing and could contribute to the in-
19 novation capacity of the United States, includ-
20 ing—

21 (i) programs run by State and local
22 governments; and

23 (ii) regional factors that are contrib-
24 uting or could contribute positively to inno-
25 vation.

1 (D) An assessment of barriers to competi-
2 tiveness in key technology focus areas and bar-
3 riers to the development and evolution of start-
4 ups, small and mid-sized business entities, and
5 industries in key technology focus areas.

6 (E) An assessment of the effectiveness of
7 the Federal Government, federally funded re-
8 search and development centers, and national
9 labs in supporting and promoting technology
10 commercialization and technology transfer, in-
11 cluding an assessment of the adequacy of Fed-
12 eral research and development funding in pro-
13 moting competitiveness and the development of
14 new technologies.

15 (F) An assessment of manufacturing ca-
16 pacity, logistics, and supply chain dynamics of
17 major export sectors, including access to a
18 skilled workforce, physical infrastructure, and
19 broadband network infrastructure.

20 (2) STRATEGY.—Each strategy submitted
21 under subsection (b)(1)(C)(ii) shall include the fol-
22 lowing:

23 (A) A plan to utilize available tools to ad-
24 dress or minimize the leading threats and chal-

1 challenges and to take advantage of the leading op-
2 portunities, including the following:

3 (i) Specific objectives, tasks, metrics,
4 and milestones for each relevant Federal
5 agency.

6 (ii) Specific plans to support public
7 and private sector investment in research,
8 technology development, and domestic
9 manufacturing in key technology focus
10 areas supportive of the national economic
11 competitiveness of the United States and
12 to foster the prudent use of public-private
13 partnerships.

14 (iii) Specific plans to promote environ-
15 mental stewardship and fair competition
16 for United States workers.

17 (iv) A description of—

18 (I) how the strategy submitted
19 under subsection (b)(3)(B) supports
20 the national security strategy; and

21 (II) how the strategy submitted
22 under such subsection is integrated
23 and coordinated with the most recent
24 national defense strategy under sec-

1 tion 113(g) of title 10, United States
2 Code.

3 (v) A plan to encourage the govern-
4 ments of countries that are allies or part-
5 ners of the United States to cooperate with
6 the execution of the strategy submitted
7 under subsection (b)(3)(B), where appro-
8 priate.

9 (vi) A plan to encourage certain inter-
10 national and multilateral organizations to
11 support the implementation of such strat-
12 egy.

13 (vii) A plan for how the United States
14 should develop local and regional capacity
15 for building innovation ecosystems across
16 the nation by providing Federal support.

17 (viii) A plan for strengthening the in-
18 dustrial base of the United States.

19 (B) An identification of additional re-
20 sources, administrative action, or legislative ac-
21 tion recommended to assist with the implemen-
22 tation of such strategy.

23 (d) FORM OF REPORTS AND STRATEGIES.—Each re-
24 port and strategy submitted under subsection (b) shall be

1 submitted in unclassified form, but may include a classi-
2 fied annex.

3 **SEC. 6. CONFORMING AMENDMENTS.**

4 (a) SCIENTIFIC AND ADVANCED-TECHNOLOGY ACT
5 OF 1992.—The Scientific and Advanced–Technology Act
6 of 1992 (42 U.S.C. 1862h et seq.) is amended—

7 (1) in section 2(5) (42 U.S.C. 1862h(5)), by
8 striking “National Science Foundation” and insert-
9 ing “National Science and Technology Foundation”;
10 and

11 (2) in section 3 (42 U.S.C. 1862i), by striking
12 “National Science Foundation” each place the term
13 appears and inserting “National Science and Tech-
14 nology Foundation”.

15 (b) NATIONAL SCIENCE FOUNDATION AUTHORIZA-
16 TION ACT OF 1998.—The National Science Foundation
17 Authorization Act of 1998 (42 U.S.C. 1862k et seq.) is
18 amended—

19 (1) in each of paragraphs (1) and (2) of section
20 2 (112 Stat. 869), by striking “National Science
21 Foundation established” and inserting “National
22 Science and Technology Foundation established”;
23 and

24 (2) in section 101(a)(6) (42 U.S.C.
25 1862k(a)(6)), by striking “National Science Founda-

1 tion” each place the term appears and inserting
2 “National Science and Technology Foundation”.

3 (c) NATIONAL SCIENCE FOUNDATION AUTHORIZA-
4 TION ACT OF 2002.—The National Science Foundation
5 Authorization Act of 2002 (42 U.S.C. 1862n et seq.) is
6 amended—

7 (1) in section 2 (42 U.S.C. 1862n note), by
8 striking “National Science Foundation” each place
9 the term appears and inserting “National Science
10 and Technology Foundation”;

11 (2) in each of paragraphs (4) and (7) of section
12 4 (42 U.S.C. 1862n note), by striking “National
13 Science Foundation established” and inserting “Na-
14 tional Science and Technology Foundation estab-
15 lished”; and

16 (3) in section 10A (42 U.S.C. 1862n–1a)—

17 (A) in the section heading, by inserting
18 “**AND TECHNOLOGY**” after “**NATIONAL**
19 **SCIENCE**”;

20 (B) in the subsection heading of subsection
21 (e), by inserting “**AND TECHNOLOGY**” after
22 “**NATIONAL SCIENCE**”; and

23 (C) by striking “National Science Founda-
24 tion” each place the term appears and inserting

1 “National Science and Technology Founda-
2 tion”.

3 (d) AMERICA COMPETES ACT.—The America COM-
4 PETES Act (Public Law 110–69; 121 Stat. 572) is
5 amended—

6 (1) in each of sections 1006(c)(1)(K) (15
7 U.S.C. 3718(c)(1)(K)), 4001 (33 U.S.C. 893), and
8 5003(b)(1), by striking “National Science Founda-
9 tion” and inserting “National Science and Tech-
10 nology Foundation”;

11 (2) in section 7001(5) (42 U.S.C. 1862o note),
12 by striking “National Science Foundation” and in-
13 sserting “National Science and Technology Founda-
14 tion”; and

15 (3) in the title heading for title VII, by insert-
16 ing “**AND TECHNOLOGY**” after “**NA-**
17 **TIONAL SCIENCE**”.

18 (e) NATIONAL SCIENCE AND TECHNOLOGY POLICY,
19 ORGANIZATION, AND PRIORITIES ACT OF 1976.—The Na-
20 tional Science and Technology Policy, Organization, and
21 Priorities Act of 1976 (42 U.S.C. 6601 et seq.) is amend-
22 ed—

23 (1) in section 205(b)(2) (42 U.S.C.
24 6614(b)(2)), by striking “National Science Founda-

1 tion” and inserting “National Science and Tech-
2 nology Foundation”; and

3 (2) in section 206 (42 U.S.C. 6615), by striking
4 “National Science Foundation” each place the term
5 appears and inserting “National Science and Tech-
6 nology Foundation”.

7 (f) AMERICA COMPETES REAUTHORIZATION ACT OF
8 2010.—The America COMPETES Reauthorization Act of
9 2010 (Public Law 111–358; 124 Stat. 3982) is amend-
10 ed—

11 (1) in the title heading of title V, by inserting
12 “**AND TECHNOLOGY**” after “**NATIONAL**
13 **SCIENCE**”;

14 (2) in the subtitle heading of subtitle A of title
15 V, by inserting “**and Technology**” after “**Na-**
16 **tional Science**”;

17 (3) in section 502 (42 U.S.C. 1862p note)—

18 (A) in paragraph (1), by striking “Na-
19 tional Science Foundation” and inserting “Na-
20 tional Science and Technology Foundation”;
21 and

22 (B) in paragraph (3), by striking “Na-
23 tional Science Foundation established” and in-
24 serting “National Science and Technology
25 Foundation established”;

1 (4) in the section heading of section 506 (42
2 U.S.C. 1862p-1), by inserting “**AND TECH-**
3 **NOLOGY**” after “**NATIONAL SCIENCE**”;

4 (5) in section 517 (42 U.S.C. 1862p-9)—

5 (A) in paragraph (2) of subsection (a), by
6 striking “National Science Foundation” each
7 place the term appears and inserting “National
8 Science and Technology Foundation”; and

9 (B) in each of subsections (a)(4), (b), and
10 (c)(2), by striking “National Science Founda-
11 tion” and inserting “National Science and
12 Technology Foundation”;

13 (6) in section 518 (124 Stat. 4016), by striking
14 “Foundation.” and inserting “and Technology Foun-
15 dation.”;

16 (7) in section 519 (124 Stat. 4016)—

17 (A) in the section heading, by inserting
18 “**AND TECHNOLOGY**” after “**NATIONAL**
19 **SCIENCE**”; and

20 (B) by striking “National Science Founda-
21 tion” each place the term appears and inserting
22 “National Science and Technology Founda-
23 tion”;

24 (8) in section 520 (42 U.S.C. 1862p-10)—

1 (A) by striking “National Science Founda-
2 tion” each place the term appears and inserting
3 “National Science and Technology Founda-
4 tion”; and

5 (B) in the subsection heading of subsection
6 (b), by striking “NSF” and inserting “NSTF”;
7 (9) in section 521 (124 Stat. 4017), by striking
8 “National Science Foundation” and inserting “Na-
9 tional Science and Technology Foundation”;

10 (10) in section 522 (42 U.S.C. 1862p–11)—

11 (A) in the section heading, by striking
12 “**NSF**” and inserting “**NSTF**”; and

13 (B) in paragraph (1), by striking “Na-
14 tional Science Foundation” and inserting “Na-
15 tional Science and Technology Foundation”;

16 (11) in section 524 (42 U.S.C. 1862p–12), by
17 striking “National Science Foundation” each place
18 the term appears and inserting “National Science
19 and Technology Foundation”; and

20 (12) in section 555(5) (20 U.S.C. 9905(5)), by
21 inserting “and Technology” after “National
22 Science”.

23 (g) STEM EDUCATION ACT OF 2015.—Each of sec-
24 tions 2 and 3 of the STEM Education Act of 2015 (42
25 U.S.C. 6621 note; 1862q) are amended by striking “Na-

1 tional Science Foundation” and inserting “National
2 Science and Technology Foundation”.

3 (h) RESEARCH EXCELLENCE AND ADVANCEMENTS
4 FOR DYSLEXIA ACT.—The Research Excellence and Ad-
5 vancements for Dyslexia Act (Public Law 114–124; 130
6 Stat. 120) is amended—

7 (1) by striking “National Science” each place
8 the term appears and inserting “National Science
9 and Technology”; and

10 (2) in section 3(a) (42 U.S.C. 1862r(a)), by in-
11 sserting “and Technology” before “Foundation’s”.

12 (i) AMERICAN INNOVATION AND COMPETITIVENESS
13 ACT.—The American Innovation and Competitiveness Act
14 (42 U.S.C. 1862s et seq.) is amended—

15 (1) in section 2 (42 U.S.C. 1862 note), by in-
16 sserting “and Technology” after “National Science”;
17 and

18 (2) in section 601(a)(1) (42 U.S.C. 1862s–
19 8(a)(1)), by striking “National Science” each place
20 the term appears and inserting “National Science
21 and Technology”.

22 (j) NATIONAL SCIENCE FOUNDATION AUTHORIZA-
23 TION ACT, 1976.—The National Science Foundation Au-
24 thorization Act, 1976 (Public Law 94–86) is amended—

1 (1) in section 2(b) (42 U.S.C. 1869a), by strik-
2 ing “National Science Foundation” each place the
3 term appears and inserting “National Science and
4 Technology Foundation”; and

5 (2) in section 6 (42 U.S.C. 1881a), by inserting
6 “and Technology” after “National Science”.

7 (k) NATIONAL SCIENCE FOUNDATION AUTHORIZA-
8 TION ACT, 1977.—Section 8 of the National Science
9 Foundation Authorization Act, 1977 (42 U.S.C. 1883) is
10 amended by striking “National Science” each place the
11 term appears and inserting “National Science and Tech-
12 nology”.

13 (l) NATIONAL SCIENCE FOUNDATION AUTHORIZA-
14 TION ACT, 1978.—Section 8 of the National Science
15 Foundation Authorization Act, 1978 (42 U.S.C. 1869b)
16 is amended by inserting “and Technology” after “National
17 Science”.

18 (m) ACT OF AUGUST 25, 1959.—The first section of
19 the Act of August 25, 1959 (42 U.S.C. 1880) is amended
20 by inserting “and Technology” after “National Science”.

21 (n) NATIONAL SCIENCE FOUNDATION AUTHORIZA-
22 TION ACT OF 1990.—Section 9 of the National Science
23 Foundation Authorization Act of 1990 (42 U.S.C. 1882)
24 is amended by striking “National Science Foundation”

1 each place the term appears and inserting “National
2 Science and Technology Foundation”.

3 (o) NATIONAL AERONAUTICS AND SPACE ADMINIS-
4 TRATION AUTHORIZATION ACT OF 2005.—Section 721 of
5 the National Aeronautics and Space Administration Au-
6 thorization Act of 2005 (42 U.S.C. 1886a) is amended
7 by striking “The National Science Foundation” and in-
8 serting “The National Science and Technology Founda-
9 tion”.

10 (p) NATIONAL SCIENCE FOUNDATION AUTHORIZA-
11 TION ACT FOR FISCAL YEAR 1986.—Section 108 of the
12 National Science Foundation Authorization Act for Fiscal
13 Year 1986 (42 U.S.C. 1886) is amended by inserting “and
14 Technology” after “National Science”.

15 (q) NATIONAL QUANTUM INITIATIVE ACT.—The Na-
16 tional Quantum Initiative Act (Public Law 115–368) is
17 amended—

18 (1) in the item relating to title III in the table
19 of contents in section 2, by striking the item relating
20 to title III and inserting the following:

“TITLE III—NATIONAL SCIENCE AND TECHNOLOGY FOUNDATION
QUANTUM ACTIVITIES’”;

21 (2) in section 102(a)(2)(A) (15 U.S.C.
22 8812(a)(2)(A)), by inserting “and Technology” after
23 “National Science”;

1 (3) in section 103 (15 U.S.C. 8813), by striking
2 “National Science Foundation” each place the term
3 appears and inserting “National Science and Tech-
4 nology Foundation”;

5 (4) in the title heading for title III, by inserting
6 **“AND TECHNOLOGY”** after **“NATIONAL**
7 **SCIENCE”**; and

8 (5) in each of sections 301 and 302 (15 U.S.C.
9 8841, 8842), by striking “National Science Founda-
10 tion” each place the term appears and inserting
11 “National Science and Technology Foundation”.

12 (r) **CYBERSECURITY ENHANCEMENT ACT OF 2014.**—
13 The Cybersecurity Enhancement Act of 2014 (15 U.S.C.
14 7421 et seq.) is amended—

15 (1) in section 201 (15 U.S.C. 7431), by striking
16 “National Science Foundation” each place the term
17 appears and inserting “National Science and Tech-
18 nology Foundation”; and

19 (2) in each of sections 301 and 302 (15 U.S.C.
20 7441, 7442), by striking “National Science Founda-
21 tion” each place the term appears and inserting
22 “National Science and Technology Foundation”.

23 (s) **HIGH-PERFORMING COMPUTING ACT OF 1991.**—
24 The High-Performing Computing Act of 1991 (15 U.S.C.
25 5501 et seq.) is amended—

1 (1) in section 101(a)(3)(C)(xi) (15 U.S.C.
2 5511(a)(3)(C)(xi)), by inserting “and Technology”
3 after “National Science”; and

4 (2) in section 201 (15 U.S.C. 5522)—

5 (A) in the section heading, by inserting
6 “**AND TECHNOLOGY**” after “**NATIONAL**
7 **SCIENCE**”; and

8 (B) by striking “National Science Founda-
9 tion” each place the term appears and inserting
10 “National Science and Technology Founda-
11 tion”.

12 (t) ARCTIC RESEARCH AND POLICY ACT OF 1984.—
13 The Arctic Research and Policy Act of 1984 (15 U.S.C.
14 4101 et seq.) is amended—

15 (1) in each of sections 101(b)(3) and 102(b)(1)
16 (15 U.S.C. 4101(b)(3), 4102(b)(1)), by inserting
17 “and Technology” after “National Science”; and

18 (2) in section 107 (15 U.S.C. 4106)—

19 (A) in the subsection heading of subsection
20 (a), by inserting “**AND TECHNOLOGY**” after
21 “**NATIONAL SCIENCE**”; and

22 (B) by striking “National Science Founda-
23 tion” each place the term appears and inserting
24 “National Science and Technology Founda-
25 tion”.

1 (u) STEVENSON-WYDLER TECHNOLOGY INNOVATION
2 ACT OF 1980.—The Stevenson-Wydler Technology Inno-
3 vation Act of 1980 (15 U.S.C. 3701 et seq.) is amended—

4 (1) in each of sections 4(5), 5(a)(2), 20, and
5 21(d) (15 U.S.C. 3703(5), 3704(a)(2), 3712, and
6 3713(d)), by inserting “and Technology” after “Na-
7 tional Science”;

8 (2) in section 9 (15 U.S.C. 3707)—

9 (A) in the section heading, by inserting
10 “**AND TECHNOLOGY**” after “**NATIONAL**
11 **SCIENCE**”;

12 (B) in each of subsections (a) and (b), by
13 striking “National Science Foundation” and in-
14 serting “National Science and Technology
15 Foundation”; and

16 (C) in subsection (c)—

17 (i) by striking “National Science
18 Foundation in” and inserting “National
19 Science and Technology Foundation in”;
20 and

21 (ii) by striking “National Science
22 Foundation under” and inserting “Na-
23 tional Science and Technology Foundation
24 under”; and

1 (3) in section 10 (15 U.S.C. 3708), by striking
2 “National Science Foundation” each place the term
3 appears and inserting “National Science and Tech-
4 nology Foundation”.

5 (v) CYBER SECURITY RESEARCH AND DEVELOP-
6 MENT ACT.—The Cyber Security Research and Develop-
7 ment Act (15 U.S.C. 7401 et seq.) is amended—

8 (1) in section 3(1) (15 U.S.C. 7402(1)), by in-
9 serting “and Technology” after “National Science”;

10 (2) in section 5 (15 U.S.C. 7404)—

11 (A) in the section heading, by inserting
12 “**AND TECHNOLOGY**” after “**NATIONAL**
13 **SCIENCE**”;

14 (B) in subsection (c)(4), by inserting “and
15 Technology” after “National Science”; and

16 (C) in subsection (d), by striking “Na-
17 tional Science Foundation’s” and inserting
18 “National Science and Technology Founda-
19 tion’s”; and

20 (3) in section 13 (15 U.S.C. 7409), by striking
21 “National Science Foundation” each place the term
22 appears and inserting “National Science and Tech-
23 nology Foundation”.

24 (w) NATIONAL SUPERCONDUCTIVITY AND COMPETI-
25 TIVENESS ACT OF 1988.—Section 6 of the National

1 Superconductivity and Competitiveness Act of 1988 (15
2 U.S.C. 5205) is amended by inserting “and Technology”
3 after “National Science”.

4 (x) WEATHER RESEARCH AND FORECASTING INNO-
5 VATION ACT OF 2017.—Each of sections 105 and
6 402(a)(1) of the Weather Research and Forecasting Inno-
7 vation Act of 2017 (15 U.S.C. 8515, 8542(a)(1)) are
8 amended by inserting “and Technology” after “National
9 Science”.