

Calendar No. 547113TH CONGRESS
2^D SESSION**S. 1468****[Report No. 113-247]**

To require the Secretary of Commerce to establish the Network for Manufacturing Innovation and for other purposes.

IN THE SENATE OF THE UNITED STATES

AUGUST 1, 2013

Mr. BROWN (for himself, Mr. BLUNT, Mr. GRAHAM, Ms. STABENOW, Mr. SCHUMER, Mr. KIRK, Mr. COONS, Ms. COLLINS, Mr. KING, Mr. WICKER, Mr. LEVIN, Mr. REED, Mr. BOOZMAN, Mr. ROCKEFELLER, Ms. AYOTTE, and Mr. UDALL of New Mexico) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

AUGUST 26, 2014

Reported, under authority of the order of the Senate of August 5 (legislative day, August 1), 2014, by Mr. ROCKEFELLER, with an amendment

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

A BILL

To require the Secretary of Commerce to establish the Network for Manufacturing 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Revitalize American
3 Manufacturing and Innovation Act of 2013”.

4 **SEC. 2. FINDINGS.**

5 Congress finds the following:

6 (1) In 2011, manufacturing contributed
7 \$1,800,000,000,000 to the Nation’s economy and
8 accounted for 47 percent of all United States ex-
9 ports.

10 (2) If ranked as its own country, the United
11 States manufacturing sector would be the 10th larg-
12 est economy in the world.

13 (3) American manufacturers employ more than
14 11,000,000,000 Americans in jobs with wages and
15 benefits that are one-third higher than the wages
16 and benefits in other sectors.

17 (4) Manufacturing has the highest multiplier ef-
18 fect, with every dollar in final sales of manufactured
19 products resulting in \$1.34 in output from other sec-
20 tors.

21 (5) As the source of nearly one-third of the
22 United States investment in research and develop-
23 ment manufacturing, firms drive innovation in the
24 United States.

25 (6) Countries such as Korea, Japan, and Ger-
26 many have a larger share of the advanced manufac-

1 turing sector than the United States. Each of these
2 countries has a positive trade balance in advanced
3 manufacturing products. In contrast, the United
4 States had an \$81,000,000,000 trade deficit in
5 2010.

6 (7) The United States share of research and
7 development spending dropped from 43.1 percent in
8 1998 to 37.3 percent in 2008, while China's share
9 of research and development spending increased
10 from 3 percent to 11.4 percent during the same pe-
11 riod.

12 (8) According to a survey by the Council on
13 Competitiveness, chief executive officers view the
14 quality and availability of scientists, researchers, and
15 engineers and the quality and availability of skilled
16 production workers as the first and second most im-
17 portant drivers of competitiveness.

18 (9) According to the Organization for Economic
19 Co-Operation and Development, the United States
20 ranked 27th out of 29 developed countries in the
21 percentage of students who earned bachelor's de-
22 grees in science and engineering in 2009.

23 (10) Colleges in China and India award more 4-
24 year engineering bachelor's degrees than United
25 States colleges.

1 **SEC. 3. ESTABLISHMENT OF NETWORK FOR MANUFAC-**
 2 **TURING INNOVATION.**

3 The National Institute of Standards and Technology
 4 Act (15 U.S.C. 271 et seq.) is amended—

5 (1) by redesignating section 34 as section 35;

6 and

7 (2) by inserting after section 33 (15 U.S.C.
 8 278r) the following:

9 **“SEC. 34. NETWORK FOR MANUFACTURING INNOVATION.**

10 **“(a) ESTABLISHMENT OF NETWORK FOR MANUFAC-**
 11 **TURING INNOVATION PROGRAM.—**

12 **“(1) IN GENERAL.—**The Secretary of Com-
 13 merce shall establish within the Institute a program
 14 to be known as the ‘Network for Manufacturing In-
 15 novation Program’ (referred to in this section as the
 16 ‘Program’).

17 **“(2) PURPOSES OF PROGRAM.—**The purposes of
 18 the Program are—

19 **“(A)** to improve the competitiveness of
 20 United States manufacturing and to increase
 21 domestic production;

22 **“(B)** to stimulate United States leadership
 23 in advanced manufacturing research, innova-
 24 tion, and technology;

25 **“(C)** to facilitate the transition of innova-
 26 tive technologies into scalable, cost-effective,

1 and high-performing manufacturing capabili-
2 ties;

3 “(D) to facilitate access by manufacturing
4 enterprises to capital-intensive infrastructure,
5 including high-performance computing, in order
6 to improve the speed with which such enter-
7 prises commercialize new processes and tech-
8 nologies;

9 “(E) to accelerate the development of an
10 advanced manufacturing workforce;

11 “(F) to facilitate peer exchange of and the
12 documentation of best practices in addressing
13 advanced manufacturing challenges; and

14 “(G) to leverage non-Federal sources of
15 support to promote a stable and sustainable
16 business model without the need for long-term
17 Federal funding.

18 “(3) SUPPORT.—The Secretary, acting through
19 the Director, shall carry out the purposes set forth
20 in paragraph (2) by supporting—

21 “(A) the Network for Manufacturing Inno-
22 vation established under subsection (b); and

23 “(B) the establishment of centers for man-
24 ufacturing innovation.

1 “(4) DIRECTOR.—The Secretary shall carry out
2 the Program through the Director.

3 “(b) ESTABLISHMENT OF NETWORK FOR MANUFAC-
4 TURING INNOVATION.—

5 “(1) IN GENERAL.—As part of the Program,
6 the Secretary of Commerce shall establish a network
7 of centers for manufacturing innovation.

8 “(2) DESIGNATION.—The network established
9 under paragraph (1) shall be known as the ‘Network
10 for Manufacturing Innovation’ (referred to in this
11 section as the ‘Network’).

12 “(c) CENTERS FOR MANUFACTURING INNOVATION.—

13 “(1) IN GENERAL.—For purposes of this sec-
14 tion, a ‘center for manufacturing innovation’ is a
15 center that—

16 “(A) has been established by a person to
17 address challenges in advanced manufacturing
18 and to assist manufacturers in retaining or ex-
19 panding industrial production and jobs in the
20 United States;

21 “(B) has a predominant focus on a manu-
22 facturing process, novel material, enabling tech-
23 nology, supply chain integration methodology,
24 or another relevant aspect of advanced manu-

1 facturing, as determined by the Secretary, with
2 the potential—

3 “(i) to improve the competitiveness of
4 United States manufacturing;

5 “(ii) to accelerate investment in ad-
6 vanced manufacturing production capacity
7 in the United States; and

8 “(iii) to enable the commercial appli-
9 cation of new technologies or industry-wide
10 manufacturing processes; and

11 “(C) includes active participation among
12 representatives from multiple industrial entities,
13 research universities, community colleges, and
14 such other entities as the Secretary considers
15 appropriate, which may include career and tech-
16 nical education schools, Federal laboratories,
17 State, local, and tribal governments, businesses,
18 educational institutions, and nonprofit organiza-
19 tions.

20 “(2) ACTIVITIES.—Activities of a center for
21 manufacturing innovation may include the following:

22 “(A) Research, development, and dem-
23 onstration projects, including proof-of-concept
24 development and prototyping, to reduce the
25 cost, time, and risk of commercializing new

1 technologies and improvements in existing tech-
2 nologies, processes, products, and research and
3 development of materials to solve pre-competi-
4 tive industrial problems with economic or na-
5 tional security implications.

6 “(B) Development and implementation of
7 education and training courses, materials, and
8 programs.

9 “(C) Development of innovative methodolo-
10 gies and practices for supply chain integration
11 and introduction of new technologies into sup-
12 ply chains.

13 “(D) Outreach and engagement with
14 small- and medium-sized manufacturing enter-
15 prises, in addition to large manufacturing en-
16 terprises.

17 “(E) Such other activities as the Sec-
18 retary, in consultation with Federal depart-
19 ments and agencies whose missions contribute
20 to or are affected by advanced manufacturing,
21 considers consistent with the purposes described
22 in subsection (a)(2).

23 “(3) ADDITIONAL CENTERS FOR MANUFAC-
24 TURING INNOVATION.—The National Additive Man-
25 ufacturing Innovation Institute and pending manu-

1 facturing centers under interagency review shall be
2 considered centers for manufacturing innovation.

3 ~~“(d) FINANCIAL ASSISTANCE TO ESTABLISH AND~~
4 ~~SUPPORT CENTERS FOR MANUFACTURING INNOVA-~~
5 ~~TION.—~~

6 ~~“(1) IN GENERAL.—~~In carrying out the Pro-
7 gram, the Secretary of Commerce shall award finan-
8 cial assistance to a person to assist the person in
9 planning, establishing, or supporting a center for
10 manufacturing innovation.

11 ~~“(2) APPLICATION.—~~A person seeking financial
12 assistance under paragraph (1) shall submit to the
13 Secretary an application therefor at such time, in
14 such manner, and containing such information as
15 the Secretary may require.

16 ~~“(3) OPEN PROCESS.—~~In soliciting applications
17 for financial assistance under paragraph (1), the
18 Secretary shall ensure an open process that will
19 allow for the consideration of all applications rel-
20 evant to advanced manufacturing regardless of tech-
21 nology area.

22 ~~“(4) SELECTION.—~~

23 ~~“(A) COMPETITIVE, MERIT REVIEW.—~~In
24 awarding financial assistance under paragraph

1 (1), the Secretary shall use a competitive, merit
2 review process.

3 “(B) COLLABORATION.—In awarding fi-
4 nancial assistance under paragraph (1), the
5 Secretary shall, acting through the National
6 Program Office established under subsection
7 (e)(1), collaborate with Federal departments
8 and agencies whose missions contribute to or
9 are affected by advanced manufacturing.

10 “(C) CONSIDERATIONS.—In selecting a
11 person who submitted an application under
12 paragraph (2) for an award of financial assist-
13 ance under paragraph (1) the Secretary shall
14 consider, at a minimum, the following:

15 “(i) The potential of the center for
16 manufacturing innovation to advance do-
17 mestic manufacturing and the likelihood of
18 economic impact in the predominant focus
19 areas of the center for manufacturing in-
20 novation.

21 “(ii) The commitment of continued fi-
22 nancial support, advice, participation, and
23 other contributions from non-Federal
24 sources, to provide leverage and resources
25 to promote a stable and sustainable busi-

1 ness model without the need for long-term
2 Federal funding.

3 “(iii) How the center for manufac-
4 turing innovation will engage with small-
5 and medium-sized manufacturing enter-
6 prises, to improve the capacity of such en-
7 terprises to commercialize new processes
8 and technologies.

9 “(iv) How the center for manufac-
10 turing innovation will carry out educational
11 and workforce activities that meet indus-
12 trial needs related to the predominant
13 focus areas of the center for manufac-
14 turing innovation.

15 “(v) How the center for manufac-
16 turing innovation will advance economic
17 competitiveness.

18 “(vi) How the center for manufac-
19 turing innovation will strengthen and lever-
20 age the assets of a region.

21 “(5) LIMITATION ON PERIOD FOR AWARDS.—

22 No award of financial assistance may be made under
23 paragraph (1) to a center of manufacturing innova-
24 tion after the 7-year period beginning on the date on

1 which the Secretary first awards financial assistance
2 to a center under such paragraph.

3 “(e) NATIONAL PROGRAM OFFICE.—

4 “(1) ESTABLISHMENT.—The Secretary of Com-
5 merce shall establish, within the Institute, the Na-
6 tional Office of the Network for Manufacturing In-
7 novation Program (referred to in this section as the
8 ‘National Program Office’), which shall oversee and
9 carry out the Program.

10 “(2) FUNCTIONS.—The functions of the Na-
11 tional Program Office are—

12 “(A) to oversee the planning, management,
13 and coordination of the Program;

14 “(B) to enter into memorandums of under-
15 standing with Federal departments and agen-
16 cies, whose missions contribute to or are af-
17 fected by advanced manufacturing, to carry out
18 the purposes described in subsection (a)(2);

19 “(C) to develop, not later than 1 year after
20 the date of the enactment of the Revitalize
21 American Manufacturing and Innovation Act of
22 2013, and update not less frequently than once
23 every 3 years thereafter, a strategic plan to
24 guide the Program;

1 “(D) to establish such procedures, proc-
2 esses, and criteria as may be necessary and ap-
3 propriate to maximize cooperation and coordi-
4 nate the activities of the Program with pro-
5 grams and activities of other Federal depart-
6 ments and agencies whose missions contribute
7 to or are affected by advanced manufacturing;

8 “(E) to establish a clearinghouse of public
9 information related to the activities of the Pro-
10 gram; and

11 “(F) to act as a convener of the Network.

12 “(3) RECOMMENDATIONS.—In developing and
13 updating the strategic plan under paragraph (2)(C),
14 the Secretary shall solicit recommendations and ad-
15 vice from a wide range of stakeholders, including in-
16 dustry, small- and medium-sized manufacturing en-
17 terprises, research universities, community colleges,
18 and other relevant organizations and institutions.

19 “(4) REPORT TO CONGRESS.—The Secretary
20 shall transmit the strategic plan required under
21 paragraph (2)(C) to the Committee on Commerce,
22 Science, and Transportation of the Senate and the
23 Committee on Science, Space, and Technology of the
24 House of Representatives.

1 “(5) HOLLINGS MANUFACTURING EXTENSION
2 PARTNERSHIP.—The Secretary shall ensure that the
3 National Program Office incorporates the Hollings
4 Manufacturing Extension Partnership into Program
5 planning to ensure that the results of the Program
6 reach small- and medium-sized entities.

7 “(6) DETAILEES.—Any Federal Government
8 employee may be detailed to the National Program
9 Office without reimbursement. Such detail shall be
10 without interruption or loss of civil service status or
11 privilege.

12 “(f) REPORTING AND AUDITING.—

13 “(1) ANNUAL REPORTS TO THE SECRETARY.—

14 “(A) IN GENERAL.—The Secretary of
15 Commerce shall require recipients of financial
16 assistance under subsection (d)(1) to annually
17 submit a report to the Secretary that describes
18 the finances and performance of the center for
19 manufacturing innovation for which such assist-
20 ance was awarded.

21 “(B) ELEMENTS.—Each report submitted
22 under subparagraph (A) shall include—

23 “(i) an accounting of expenditures of
24 amounts awarded to the recipient under
25 subsection (d)(1); and

1 “(ii) a description of the performance
2 of the center for manufacturing innovation
3 with respect to—

4 “(I) its goals, plans, financial
5 support, and accomplishments; and

6 “(II) how the center for manu-
7 facturing innovation has furthered the
8 purposes described in subsection
9 (a)(2).

10 “(2) ANNUAL REPORTS TO CONGRESS.—

11 “(A) IN GENERAL.—Not less frequently
12 than once each year, the Secretary shall submit
13 a report to Congress that describes the per-
14 formance of the Program during the most re-
15 cent 1-year period.

16 “(B) ELEMENTS.—Each report submitted
17 under subparagraph (A) shall include, for the
18 period covered by the report—

19 “(i) a summary and assessment of the
20 reports received by the Secretary under
21 paragraph (1);

22 “(ii) an accounting of the funds ex-
23 pended by the Secretary under the Pro-
24 gram; and

1 “(iii) an assessment of the Program
2 with respect to the purposes described in
3 subsection (a)(2).

4 “(3) TRIENNIAL ASSESSMENT BY GAO.—

5 “(A) IN GENERAL.—Not less frequently
6 than once every 3 years, the Comptroller Gen-
7 eral of the United States shall submit to Con-
8 gress an assessment of the operation of the
9 Program during the most recent 3-year period.

10 “(B) ELEMENTS.—Each assessment sub-
11 mitted under subparagraph (A) shall include,
12 for the period covered by the report—

13 “(i) a review of the management, co-
14 ordination, and industry utility of the Pro-
15 gram;

16 “(ii) an assessment of the extent to
17 which the Program has furthered the pur-
18 poses described in subsection (a)(2); and

19 “(iii) such recommendations for legis-
20 lative and administrative action as the
21 Comptroller General considers appropriate
22 to improve the Program.

23 “(g) ADDITIONAL AUTHORITIES.—

24 “(1) APPOINTMENT OF PERSONNEL AND CON-
25 TRACTS.—The Secretary of Commerce may appoint

1 such personnel and enter into such contracts, finan-
2 cial assistance agreements, and other agreements as
3 the Secretary considers necessary or appropriate to
4 carry out the Program including support for re-
5 search and development activities involving a center
6 for manufacturing innovation.

7 “(2) TRANSFER OF FUNDS.—The Secretary
8 may transfer to other Federal agencies such sums as
9 the Secretary considers necessary or appropriate to
10 carry out the Program.

11 “(3) AUTHORITY OF OTHER AGENCIES.—In the
12 event that the Secretary exercises the authority to
13 transfer funds to another agency under paragraph
14 (2), such agency may award and administer all as-
15 pects of financial assistance awards under this sec-
16 tion.

17 “(4) USE OF RESOURCES.—In furtherance of
18 the purposes of the Program, the Secretary may use,
19 with the consent of a covered entity and with or
20 without reimbursement, the land, services, equip-
21 ment, personnel, and facilities of such covered entity.

22 “(5) ACCEPTANCE OF RESOURCES.—In addition
23 to amounts appropriated to carry out the Program,
24 the Secretary may accept funds, services, equipment,

1 personnel, and facilities from any covered entity to
2 carry out the Program.

3 “(6) COVERED ENTITY.—For purposes of this
4 subsection, a covered entity is any Federal depart-
5 ment, Federal agency, instrumentality of the United
6 States, State, local government, tribal government,
7 Territory or possession of the United States, or of
8 any political subdivision thereof, or international or-
9 ganization, or any public or private entity or indi-
10 vidual.

11 “(h) PATENTS.—Chapter 18 of title 35, United
12 States Code, shall not apply if financial assistance is
13 awarded under this section solely for the purpose of plan-
14 ning, establishing, or supporting new or existing centers
15 for manufacturing innovation.

16 “(i) FUNDING.—

17 “(1) NETWORK FOR MANUFACTURING INNOVA-
18 TION FUND.—

19 “(A) ESTABLISHMENT.—There is estab-
20 lished in the Treasury of the United States a
21 fund to be known as the ‘Network for Manufac-
22 turing Innovation Fund’ (referred to in this
23 paragraph as the ‘Fund’).

24 “(B) ELEMENTS.—There shall be depos-
25 ited in the Fund, which shall constitute the as-

1 sets of the Fund, amounts appropriated or oth-
2 erwise made available to carry out the Program.

3 “(C) AVAILABILITY.—Amounts deposited
4 in the Fund shall be available to the Secretary
5 of Commerce, at the discretion of the Secretary,
6 or the Secretary’s delegee, to carry out the Pro-
7 gram without further appropriation and without
8 fiscal year limitation.

9 “(2) AUTHORIZATION OF APPROPRIATIONS.—
10 There is authorized to be appropriated
11 \$600,000,000 to the Secretary of Commerce to carry
12 out this section.

13 “(3) ADMINISTRATIVE EXPENSES.—The Sec-
14 retary of Commerce may use not more than 5 per-
15 cent of the amounts appropriated pursuant to para-
16 graph (2) to pay the salaries, expenses, and other
17 administrative costs incurred by the Secretary under
18 this section.

19 “(4) RESCISSION.—There is hereby rescinded,
20 from appropriated discretionary funds that remain
21 available for obligation as of the date of the enact-
22 ment of this Act, \$600,000,000.”

1 **SEC. 4. REPORT.**

2 (a) **DEFINED TERM.**—In this section, the term “rare
3 earth monopoly” means the domination of the market for
4 rare earth elements, including—

5 (1) rare earth oxides, metals, alloys, and
6 magnets;

7 (2) integrated systems that include rare earth
8 components, including wind turbines, motors, and
9 catalysts for green technology lighting and transpor-
10 tation in commercial products; and

11 (3) oxide, metal, or alloy-based rare earth mate-
12 rials, magnets, components and systems for guided
13 ordinance, stealth and drone technologies, interro-
14 gating and targeting lasers, radar, sonar, and weap-
15 ons systems used by the United States military.

16 (b) **SURVEY.**—The Secretary of Commerce shall con-
17 duct a survey that—

18 (1) measures the economic impact of China’s
19 rare earth monopoly on the United States and other
20 affected nations to determine the magnitude of eco-
21 nomic and intellectual property loss resulting from
22 China’s rare earth monopoly; and

23 (2) looks beyond gross economic figures of
24 value added goods and identifies specific tech-
25 nologies, industries, and defense systems that are

1 now primarily produced in, or are likely to relocate
2 or migrate to, China.

3 (c) REPORT.—Not later than 1 year after the date
4 of the enactment of this Act, the Secretary of Commerce
5 shall submit a report to Congress that contains the results
6 of the survey conducted under subsection (a). The report
7 shall contain recommendations on how the United States
8 should—

9 (1) initiate direct dialogue with affected nations
10 to assess the short- and long-term economic con-
11 sequences of China’s rare earth monopoly and re-
12 lated trade practices; and

13 (2) promote cooperative resolutions to facilitate
14 partnership structures that will offset imbalances
15 caused by China’s rare earth monopoly.

16 **SECTION 1. SHORT TITLE.**

17 *This Act may be cited as the “Revitalize American*
18 *Manufacturing and Innovation Act of 2014”.*

19 **SEC. 2. FINDINGS.**

20 *Congress finds the following:*

21 (1) *In 2011, manufacturing contributed*
22 *\$1,800,000,000,000 to the Nation’s economy and ac-*
23 *counted for 47 percent of all United States exports.*

1 (2) *If ranked as its own country, the United*
2 *States manufacturing sector would be the 10th largest*
3 *economy in the world.*

4 (3) *American manufacturers employ more than*
5 *11,000,000 Americans in jobs with wages and benefits*
6 *that are one-third higher than the wages and benefits*
7 *in other sectors.*

8 (4) *Manufacturing has the highest multiplier ef-*
9 *fect, with every dollar in final sales of manufactured*
10 *products resulting in \$1.34 in output from other sec-*
11 *tors.*

12 (5) *As the source of nearly one-third of the*
13 *United States investment in research and develop-*
14 *ment, manufacturing firms drive innovation in the*
15 *United States.*

16 (6) *Countries such as Korea, Japan, and Ger-*
17 *many have a larger share of the advanced manufac-*
18 *turing sector than the United States. Each of these*
19 *countries has a positive trade balance in advanced*
20 *manufacturing products. In contrast, the United*
21 *States had an \$81,000,000,000 trade deficit in goods*
22 *with advanced technology products in 2013.*

23 (7) *The United States share of research and de-*
24 *velopment spending dropped from 43.1 percent in*
25 *1998 to 37.3 percent in 2008, while China's share of*

1 *research and development spending increased from 3*
 2 *percent to 11.4 percent during the same period.*

3 *(8) According to a survey by the Council on*
 4 *Competitiveness, chief executive officers view the qual-*
 5 *ity and availability of scientists, researchers, and en-*
 6 *gineers and the quality and availability of skilled*
 7 *production workers as the first and second most im-*
 8 *portant drivers of competitiveness.*

9 *(9) According to the Organization for Economic*
 10 *Co-Operation and Development, the United States*
 11 *ranked 27th out of 29 developed countries in the per-*
 12 *centage of students who earned bachelor's degrees in*
 13 *science and engineering in 2009.*

14 *(10) Colleges in China and India award more 4-*
 15 *year engineering bachelor's degrees than United*
 16 *States colleges.*

17 **SEC. 3. ESTABLISHMENT OF NETWORK FOR MANUFAC-**
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 20 *ards and Technology Act (15 U.S.C. 271 et seq.) is amend-*
 21 *ed—*

22 *(1) by redesignating section 34 as section 35;*
 23 *and*

24 *(2) by inserting after section 33 (15 U.S.C.*
 25 *278r) the following:*

1 **“SEC. 34. NETWORK FOR MANUFACTURING INNOVATION.**

2 “(a) *ESTABLISHMENT OF NETWORK FOR MANUFAC-*
3 *TURING INNOVATION PROGRAM.—*

4 “(1) *IN GENERAL.—The Secretary of Commerce*
5 *shall establish within the Institute a program to be*
6 *known as the ‘Network for Manufacturing Innovation*
7 *Program’ (referred to in this section as the ‘Pro-*
8 *gram’).*

9 “(2) *PURPOSES OF PROGRAM.—The purposes of*
10 *the Program are—*

11 “(A) *to improve measurably the competi-*
12 *tiveness of United States manufacturing and to*
13 *increase domestic production;*

14 “(B) *to stimulate United States leadership*
15 *in advanced manufacturing research, innovation,*
16 *and technology that has a strong potential to*
17 *generate substantial benefits to the Nation that*
18 *extend significantly beyond the direct return to*
19 *participants in the Program;*

20 “(C) *to facilitate the transition of innova-*
21 *tive and transformative technologies into scal-*
22 *able, cost-effective, and high-performing manu-*
23 *facturing capabilities;*

24 “(D) *to facilitate access by manufacturing*
25 *enterprises to capital-intensive infrastructure,*
26 *including high-performance computing, in order*

1 to improve the speed with which such enterprises
2 commercialize new processes and technologies;

3 “(E) to accelerate measurably the develop-
4 ment of an advanced manufacturing workforce;

5 “(F) to facilitate peer exchange of and the
6 documentation of best practices in addressing
7 advanced manufacturing challenges; and

8 “(G) to leverage non-Federal sources of sup-
9 port to promote a stable and sustainable business
10 model without the need for long-term Federal
11 funding.

12 “(3) *SUPPORT.*—The Secretary, acting through
13 the Director, shall carry out the purposes set forth in
14 paragraph (2) by supporting—

15 “(A) the Network for Manufacturing Inno-
16 vation established under subsection (b); and

17 “(B) the establishment of centers for manu-
18 facturing innovation.

19 “(4) *DIRECTOR.*—The Secretary shall carry out
20 the Program through the Director.

21 “(b) *ESTABLISHMENT OF NETWORK FOR MANUFAC-*
22 *TURING INNOVATION.*—

23 “(1) *IN GENERAL.*—As part of the Program, the
24 Secretary of Commerce shall establish a network of
25 centers for manufacturing innovation.

1 “(2) *DESIGNATION.*—*The network established*
2 *under paragraph (1) shall be known as the ‘Network*
3 *for Manufacturing Innovation’ (referred to in this*
4 *section as the ‘Network’).*”

5 “(c) *CENTERS FOR MANUFACTURING INNOVATION.*—

6 “(1) *IN GENERAL.*—*For purposes of this section,*
7 *a ‘center for manufacturing innovation’ is a center*
8 *that—*

9 “(A) *has been established by a person or*
10 *group of persons to address challenges in ad-*
11 *vanced manufacturing and to assist manufactur-*
12 *ers in retaining or expanding industrial produc-*
13 *tion and jobs in the United States;*

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15 *facturing process, novel material, enabling tech-*
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17 *another relevant aspect of advanced manufac-*
18 *turing, as determined by the Secretary, with the*
19 *potential—*

20 “(i) *to improve the competitiveness of*
21 *United States manufacturing;*

22 “(ii) *to accelerate non-Federal invest-*
23 *ment in advanced manufacturing produc-*
24 *tion capacity in the United States;*

1 “(iii) to increase measurably the non-
2 Federal investment in advanced manufac-
3 turing research; and

4 “(iv) to enable the commercial applica-
5 tion of new technologies or industry-wide
6 manufacturing processes; and

7 “(C) includes active participation among
8 representatives from multiple industrial entities,
9 research universities, community colleges, and
10 such other entities as the Secretary considers ap-
11 propriate, which may include industry-led con-
12 sortia, career and technical education schools,
13 Federal laboratories, State, local, and tribal gov-
14 ernments, businesses, educational institutions,
15 and nonprofit organizations.

16 “(2) ACTIVITIES.—Activities of a center for man-
17 ufacturing innovation may include the following:

18 “(A) Research, development, and dem-
19 onstration projects, including proof-of-concept
20 development and prototyping, to reduce the cost,
21 time, and risk of commercializing new tech-
22 nologies and improvements in existing tech-
23 nologies, processes, products, and research and
24 development of materials to solve pre-competitive

1 *industrial problems with economic or national*
2 *security implications.*

3 “(B) *Development and implementation of*
4 *education and training courses, materials, and*
5 *programs.*

6 “(C) *Development of workforce recruitment*
7 *programs and initiatives.*

8 “(D) *Development of innovative methodolo-*
9 *gies and practices for supply chain integration*
10 *and introduction of new technologies into supply*
11 *chains.*

12 “(E) *Development or updating of industry-*
13 *led, shared-vision technology roadmaps for the*
14 *development of technologies underpinning next-*
15 *generation or transformational innovations.*

16 “(F) *Outreach and engagement with small-*
17 *and medium-sized manufacturing enterprises, in*
18 *addition to large manufacturing enterprises.*

19 “(G) *Such other activities as the Secretary,*
20 *in consultation with Federal departments and*
21 *agencies whose missions contribute to or are af-*
22 *ected by advanced manufacturing, considers*
23 *consistent with the purposes described in sub-*
24 *section (a)(2).*

1 “(3) *ADDITIONAL CENTERS FOR MANUFACTURING*
2 *INNOVATION.*—

3 “(A) *IN GENERAL.*—*The National Additive*
4 *Manufacturing Innovation Institute and manu-*
5 *facturing centers formally recognized or under*
6 *pending interagency review on the date of enact-*
7 *ment of the Revitalize American Manufacturing*
8 *and Innovation Act of 2014 shall be considered*
9 *centers for manufacturing innovation, but such*
10 *centers shall not receive any preference for finan-*
11 *cial assistance under subsection (d) solely on the*
12 *basis of being considered centers for manufac-*
13 *turing innovation under this paragraph.*

14 “(B) *NETWORK PARTICIPATION.*—*A manu-*
15 *facturing center that is substantially similar to*
16 *those established under this subsection but that*
17 *does not receive financial assistance under sub-*
18 *section (d) may, upon request of the center, be*
19 *recognized as a center by the Secretary for pur-*
20 *poses of participation in the Network.*

21 “(d) *FINANCIAL ASSISTANCE TO ESTABLISH AND SUP-*
22 *PORT CENTERS FOR MANUFACTURING INNOVATION.*—

23 “(1) *IN GENERAL.*—*In carrying out the Pro-*
24 *gram, the Secretary of Commerce shall award finan-*
25 *cial assistance to a person to assist the person in*

1 *planning, establishing, or supporting a center for*
2 *manufacturing innovation.*

3 “(2) *APPLICATION.*—*A person seeking financial*
4 *assistance under paragraph (1) shall submit to the*
5 *Secretary an application therefor at such time, in*
6 *such manner, and containing such information as the*
7 *Secretary may require. The application shall, at a*
8 *minimum, describe the specific sources and amounts*
9 *of non-Federal financial support for the center on the*
10 *date financial assistance is sought, as well as the an-*
11 *ticipated sources and amounts of non-Federal finan-*
12 *cial support during the period for which the center*
13 *could be eligible for continued Federal financial as-*
14 *sistance under this section.*

15 “(3) *OPEN PROCESS.*—*In soliciting applications*
16 *for financial assistance under paragraph (1), the Sec-*
17 *retary shall ensure an open process that will allow for*
18 *the consideration of all applications relevant to ad-*
19 *vanced manufacturing regardless of technology area.*

20 “(4) *SELECTION.*—

21 “(A) *COMPETITIVE, MERIT REVIEW.*—*In*
22 *awarding financial assistance under paragraph*
23 *(1), the Secretary shall use a competitive, merit*
24 *review process that includes peer review by a di-*

1 verse group of individuals with relevant exper-
2 tise.

3 “(B) *PERFORMANCE MEASUREMENT, TRANS-*
4 *PARENCY, AND ACCOUNTABILITY.*—For each
5 award of financial assistance under paragraph
6 (1), the Secretary shall—

7 “(i) make publicly available at the
8 time of the award a description of the bases
9 for the award, including an explanation of
10 the relative merits of the winning applicant
11 as compared to other applications received,
12 if applicable; and

13 “(ii) develop and implement metrics-
14 based performance measures to assess the ef-
15 fectiveness of the activities funded.

16 “(C) *COLLABORATION.*—In awarding finan-
17 cial assistance under paragraph (1), the Sec-
18 retary shall, acting through the National Pro-
19 gram Office established under subsection (e)(1),
20 collaborate with Federal departments and agen-
21 cies whose missions contribute to or are affected
22 by advanced manufacturing.

23 “(D) *CONSIDERATIONS.*—In selecting a per-
24 son who submitted an application under para-
25 graph (2) for an award of financial assistance

1 *under paragraph (1) the Secretary shall con-*
2 *sider, at a minimum, the following:*

3 *“(i) The potential of the center for*
4 *manufacturing innovation to advance do-*
5 *mestic manufacturing and the likelihood of*
6 *economic impact in the predominant focus*
7 *areas of the center for manufacturing inno-*
8 *vation.*

9 *“(ii) The commitment of continued fi-*
10 *ancial support, advice, participation, and*
11 *other contributions from non-Federal*
12 *sources, to provide leverage and resources to*
13 *promote a stable and sustainable business*
14 *model without the need for long-term Fed-*
15 *eral funding.*

16 *“(iii) Whether the financial support*
17 *provided to the center from non-Federal*
18 *sources significantly outweighs the requested*
19 *Federal financial assistance.*

20 *“(iv) How the center for manufac-*
21 *turing innovation will increase the non-*
22 *Federal investment in advanced manufac-*
23 *turing research in the United States*

24 *“(v) How the center for manufacturing*
25 *innovation will engage with small- and me-*

1 *dium-sized manufacturing enterprises, to*
2 *improve the capacity of such enterprises to*
3 *commercialize new processes and tech-*
4 *nologies.*

5 *“(vi) How the center for manufac-*
6 *turing innovation will carry out edu-*
7 *cational and workforce activities that meet*
8 *industrial needs related to the predominant*
9 *focus areas of the center for manufacturing*
10 *innovation.*

11 *“(vii) How the center for manufac-*
12 *turing innovation will advance economic*
13 *competitiveness both globally and domesti-*
14 *cally and generate substantial benefits to*
15 *the Nation that extend beyond the direct re-*
16 *turn to participants in the Program.*

17 *“(viii) Whether the predominant focus*
18 *of the center for manufacturing innovation*
19 *is a manufacturing process, novel material,*
20 *enabling technology, supply chain integra-*
21 *tion methodology, or other relevant aspect of*
22 *advanced manufacturing that has not al-*
23 *ready been commercialized, marketed, dis-*
24 *tributed, or sold by another entity.*

1 “(ix) *How the center for manufac-*
2 *turing innovation will strengthen and lever-*
3 *age the assets of a region.*

4 “(5) *LIMITATIONS ON AWARDS.—*

5 “(A) *IN GENERAL.—No award of financial*
6 *assistance may be made under paragraph (1) to*
7 *a center of manufacturing innovation after the*
8 *7-year period beginning on the date on which the*
9 *Secretary first awards financial assistance to a*
10 *center under that paragraph.*

11 “(B) *MATCHING FUNDS AND WEIGHTED*
12 *PREFERENCES.—The total Federal financial as-*
13 *sistance awarded to a center of manufacturing*
14 *innovation, including the financial assistance*
15 *under paragraph (1), in a given year shall not*
16 *exceed 50 percent of the total funding of the cen-*
17 *ter in that year. The Secretary may give a*
18 *weighted preference to applicants seeking less*
19 *than the maximum amount of funding allowed*
20 *under this paragraph.*

21 “(C) *FUNDING DECREASE.—The amount of*
22 *financial assistance provided to a center of man-*
23 *ufacturing innovation under paragraph (1) shall*
24 *decrease after the second year of funding for a*
25 *center, and shall continue to decrease thereafter*

1 *in each year in which financial assistance is*
2 *provided, unless the Secretary determines that—*

3 “(i) *the center is otherwise meeting its*
4 *stated goals and metrics under this Act;*

5 “(ii) *unforeseen circumstances have al-*
6 *tered the center’s anticipated funding; and*

7 “(iii) *the center can identify future*
8 *non-Federal funding sources that would*
9 *warrant a temporary exemption from the*
10 *limitations established in this subpara-*
11 *graph.*

12 “(D) *AWARD LIMIT.—No more than 15 cen-*
13 *ters of manufacturing innovation may receive fi-*
14 *nancial assistance under paragraph (1) in any*
15 *single year.*

16 “(e) *NATIONAL PROGRAM OFFICE.—*

17 “(1) *ESTABLISHMENT.—The Secretary of Com-*
18 *merce shall establish, within the Institute, the Na-*
19 *tional Office of the Network for Manufacturing Inno-*
20 *vation Program (referred to in this section as the ‘Na-*
21 *tional Program Office’), which shall oversee and carry*
22 *out the Program.*

23 “(2) *FUNCTIONS.—The functions of the National*
24 *Program Office are—*

1 “(A) to oversee the planning, management,
2 and coordination of the Program;

3 “(B) to enter into memorandums of under-
4 standing with Federal departments and agencies,
5 whose missions contribute to or are affected by
6 advanced manufacturing, to carry out the pur-
7 poses described in subsection (a)(2);

8 “(C) to develop, not later than 1 year after
9 the date of the enactment of the Revitalize Amer-
10 ican Manufacturing and Innovation Act of 2014,
11 and update not less frequently than once every 2
12 years thereafter, a strategic plan to guide the
13 Program;

14 “(D) to establish such procedures, processes,
15 and criteria as may be necessary and appro-
16 priate to maximize cooperation and coordinate
17 the activities of the Program with programs and
18 activities of other Federal departments and agen-
19 cies whose missions contribute to or are affected
20 by advanced manufacturing;

21 “(E) to establish a clearinghouse of public
22 information related to the activities of the Pro-
23 gram; and

24 “(F) to act as a convener of the Network.

1 “(3) *RECOMMENDATIONS.*—*In developing and*
2 *updating the strategic plan under paragraph (2)(C),*
3 *the Secretary shall solicit recommendations and ad-*
4 *vice from a wide range of stakeholders, including in-*
5 *dustry, small- and medium-sized manufacturing en-*
6 *terprises, research universities, community colleges,*
7 *and other relevant organizations and institutions on*
8 *an ongoing basis.*

9 “(4) *REPORT TO CONGRESS.*—*Upon completion,*
10 *the Secretary shall transmit the strategic plan re-*
11 *quired under paragraph (2)(C) to the Committee on*
12 *Commerce, Science, and Transportation of the Senate*
13 *and the Committee on Science, Space, and Technology*
14 *of the House of Representatives.*

15 “(5) *HOLLINGS MANUFACTURING EXTENSION*
16 *PARTNERSHIP.*—*The Secretary shall ensure that the*
17 *National Program Office incorporates the Hollings*
18 *Manufacturing Extension Partnership into Program*
19 *planning to ensure that the results of the Program*
20 *reach small- and medium-sized entities.*

21 “(6) *DETAILEES.*—*Any Federal Government em-*
22 *ployee may be detailed to the National Program Of-*
23 *fice without reimbursement. Such detail shall be with-*
24 *out interruption or loss of civil service status or*
25 *privilege.*

1 “(f) *REPORTING AND AUDITING.*—

2 “(1) *ANNUAL REPORTS TO THE SECRETARY.*—

3 “(A) *IN GENERAL.*—*The Secretary of Com-*
4 *merce shall require each recipient of financial*
5 *assistance under subsection (d)(1) to annually*
6 *submit a report to the Secretary that describes*
7 *the finances and performance of the center for*
8 *manufacturing innovation for which such assist-*
9 *ance was awarded.*

10 “(B) *ELEMENTS.*—*Each report submitted*
11 *under subparagraph (A) shall include—*

12 “(i) *an accounting of expenditures of*
13 *amounts awarded to the recipient under*
14 *subsection (d)(1); and*

15 “(ii) *consistent with the metrics-based*
16 *performance measures developed and imple-*
17 *mented by the Secretary under this section,*
18 *a description of the performance of the cen-*
19 *ter for manufacturing innovation with re-*
20 *spect to—*

21 “(I) *its goals, plans, financial*
22 *support, and accomplishments; and*

23 “(II) *how the center for manufac-*
24 *turing innovation has furthered or*

1 *failed to meet the purposes described in*
2 *subsection (a)(2).*

3 “(2) *ANNUAL REPORTS TO CONGRESS.*—

4 “(A) *IN GENERAL.*—*Not less frequently than*
5 *once each year, the Secretary shall submit a re-*
6 *port to Congress that describes the performance*
7 *of the Program during the most recent 1-year pe-*
8 *riod.*

9 “(B) *ELEMENTS.*—*Each report submitted*
10 *under subparagraph (A) shall include, for the pe-*
11 *riod covered by the report—*

12 “(i) *a summary and assessment of the*
13 *reports received by the Secretary under*
14 *paragraph (1);*

15 “(ii) *an accounting of the funds ex-*
16 *pended by the Secretary under the Program,*
17 *including any temporary exemptions grant-*
18 *ed from the requirements of subsection*
19 *(d)(5)(C);*

20 “(iii) *an assessment of the participa-*
21 *tion in, and contributions to, the Network*
22 *by any centers for manufacturing innova-*
23 *tion not receiving financial assistance*
24 *under subsection (d)(1); and*

1 “(iv) an assessment of the Program
2 with respect to meeting the purposes de-
3 scribed in subsection (a)(2).

4 “(3) BIENNIAL ASSESSMENT BY GAO.—

5 “(A) IN GENERAL.—Not less frequently than
6 once every 2 years, the Comptroller General of
7 the United States shall submit to Congress an
8 assessment of the operation of the Program dur-
9 ing the most recent 2-year period, including a
10 final report regarding the overall success of the
11 Program.

12 “(B) ELEMENTS.—Each assessment sub-
13 mitted under subparagraph (A) shall include, for
14 the period covered by the report—

15 “(i) a review of the management, co-
16 ordination, and industry utility of the Pro-
17 gram;

18 “(ii) an assessment of the extent to
19 which the Program has furthered the pur-
20 poses described in subsection (a)(2);

21 “(iii) such recommendations for legis-
22 lative and administrative action as the
23 Comptroller General considers appropriate
24 to improve the Program; and

1 “(iv) an assessment as to whether any
2 prior recommendations for improvement
3 made by the Comptroller General have been
4 implemented or adopted.

5 “(g) *ADDITIONAL AUTHORITIES.*—

6 “(1) *APPOINTMENT OF PERSONNEL AND CON-*
7 *TRACTS.*—*The Secretary of Commerce may appoint*
8 *such personnel and enter into such contracts, finan-*
9 *cial assistance agreements, and other agreements as*
10 *the Secretary considers necessary or appropriate to*
11 *carry out the Program, including support for research*
12 *and development activities involving a center for*
13 *manufacturing innovation.*

14 “(2) *TRANSFER OF FUNDS.*—*The Secretary may*
15 *transfer to other Federal agencies such sums as the*
16 *Secretary considers necessary or appropriate to carry*
17 *out the Program. No funds so transferred may be used*
18 *to reimburse or otherwise pay for the costs of finan-*
19 *cial assistance incurred or commitments of financial*
20 *assistance made prior to the date of enactment of the*
21 *Revitalize American Manufacturing and Innovation*
22 *Act of 2014.*

23 “(3) *AUTHORITY OF OTHER AGENCIES.*—*In the*
24 *event that the Secretary exercises the authority to*
25 *transfer funds to another agency under paragraph*

1 (2), such agency may award and administer, under
2 the same conditions and constraints applicable to the
3 Secretary, all aspects of financial assistance awards
4 under this section.

5 “(4) *USE OF RESOURCES.*—In furtherance of the
6 purposes of the Program, the Secretary may use, with
7 the consent of a covered entity and with or without
8 reimbursement, the land, services, equipment, per-
9 sonnel, and facilities of such covered entity.

10 “(5) *ACCEPTANCE OF RESOURCES.*—In addition
11 to amounts appropriated to carry out the Program,
12 the Secretary may accept funds, services, equipment,
13 personnel, and facilities from any covered entity to
14 carry out the Program, subject to the same conditions
15 and constraints otherwise applicable to the Secretary
16 under this section.

17 “(6) *COVERED ENTITY.*—For purposes of this
18 subsection, a covered entity is any Federal depart-
19 ment, Federal agency, instrumentality of the United
20 States, State, local government, tribal government,
21 Territory or possession of the United States, or of any
22 political subdivision thereof, or international organi-
23 zation, or any public or private entity or individual.

24 “(h) *PATENTS.*—Chapter 18 of title 35, United States
25 Code, shall apply to any funding agreement (as defined in

1 *section 201 of that title) awarded to new or existing centers*
2 *for manufacturing innovation.*

3 “(i) *FUNDING.—*

4 “(1) *NETWORK FOR MANUFACTURING INNOVA-*
5 *TION FUND.—*

6 “(A) *ESTABLISHMENT.—There is estab-*
7 *lished in the Treasury of the United States a*
8 *fund to be known as the ‘Network for Manufac-*
9 *turing Innovation Fund’ (referred to in this sub-*
10 *section as the ‘Fund’).*

11 “(B) *ELEMENTS.—There shall be deposited*
12 *in the Fund, which shall constitute the assets of*
13 *the Fund, amounts appropriated or otherwise*
14 *made available to carry out the Program.*

15 “(C) *AVAILABILITY.—Amounts deposited in*
16 *the Fund shall be available to the Secretary of*
17 *Commerce, at the discretion of the Secretary, or*
18 *the Secretary’s designee, to carry out the Pro-*
19 *gram without further appropriation and without*
20 *fiscal year limitation.*

21 “(2) *AUTHORIZATION OF APPROPRIATIONS.—*
22 *There is authorized to be appropriated \$300,000,000*
23 *to the Secretary of Commerce to be deposited in the*
24 *Fund established under paragraph (1) to carry out*
25 *this section.*

1 “(3) *ADMINISTRATIVE EXPENSES.*—*The Sec-*
2 *retary of Commerce may use not more than 5 percent*
3 *of the amounts appropriated pursuant to paragraph*
4 *(2) to pay the salaries and expenses of those Federal*
5 *employees in the National Program Office.*

6 “(4) *ADDITIONAL FUNDING SOURCES.*—*Notwith-*
7 *standing any other provision of law, in addition to*
8 *any funds appropriated under paragraph (2), the*
9 *Secretary of Commerce may use not more than 10*
10 *percent of the funds of any economic development,*
11 *manufacturing, or small business assistance program,*
12 *except for the Hollings Manufacturing Extension Pro-*
13 *gram, to carry out the Program established in this*
14 *section.*

15 “(5) *RESCISSION.*—*There is hereby rescinded,*
16 *from appropriated discretionary funds that remain*
17 *available for obligation as of the date of the enact-*
18 *ment of the Revitalize American Manufacturing and*
19 *Innovation Act of 2014, \$300,000,000.*

20 “(j) *CONSOLIDATION OF ADVANCED MANUFACTURING*
21 *TECHNOLOGY CONSORTIA (AMTECH) PROGRAM.*—*The Sec-*
22 *retary is directed to merge the Advanced Manufacturing*
23 *Technology Consortia (AMTech) Program, which has not*
24 *been previously authorized but has been funded in both fis-*

1 *cal year 2013 and 2014, into the Program established in*
2 *this section.*

3 “(k) *SUNSET.*—*The authority to provide financial as-*
4 *sistance to establish or support a center for manufacturing*
5 *innovation under subsection (i) terminates effective Decem-*
6 *ber 31, 2024, but the Program and the Network established*
7 *under this section may continue to operate, subject to the*
8 *availability of appropriations, if the Secretary determines*
9 *that the purposes in subsection (a)(2) are being met.”.*

10 (b) *REPEAL OF DUPLICATIVE PROGRAM; TECHNOLOGY*
11 *INNOVATION PROGRAM.*—

12 (1) *IN GENERAL.*—*Section 28 of the National In-*
13 *stitute of Standards and Technology Act (15 U.S.C.*
14 *278n) is repealed.*

15 (2) *TRANSITION.*—*Notwithstanding the repeal*
16 *made by paragraph (1), the Director shall carry out*
17 *section 28 of the National Institute of Standards and*
18 *Technology Act (15 U.S.C. 278n) as that section was*
19 *in effect on the day before the date of enactment of*
20 *this Act, with respect to applications for grants, coop-*
21 *erative agreements, or contracts under that section*
22 *submitted before that date.*

23 (3) *TECHNICAL AND CONFORMING AMEND-*
24 *MENTS.*—

1 (A) Section 2(d) of the National Institute of
2 Standards and Technology Act (15 U.S.C.
3 272(d)) is amended by striking “sections 25, 26,
4 and 28” and inserting “sections 25 and 26”.

5 (B) Section 10(h)(1) of the National Insti-
6 tute of Standards and Technology Act (15 U.S.C.
7 278(h)(1)) is amended by striking “, including
8 the Program established under section 28,”.

9 (c) *SENSE OF CONGRESS.*—It is the sense of Congress
10 that the industry-led consortia envisioned under the Ad-
11 vanced Manufacturing Technology Consortia (AMTech)
12 Program should participate in the centers for manufac-
13 turing innovation established under section 34 of the Na-
14 tional Institute of Standards and Technology Act (15
15 U.S.C. 271 et seq.).

16 **SEC. 4. REPORT.**

17 (a) *DEFINED TERM.*—In this section, the term “rare
18 earth monopoly” means the domination of the market for
19 rare earth elements, including—

20 (1) rare earth oxides, metals, alloys, and
21 magnets;

22 (2) integrated systems that include rare earth
23 components, including wind turbines, motors, elec-
24 tronics, and catalysts for green technology lighting
25 and transportation in commercial products; and

1 (3) *oxide, metal, or alloy-based rare earth mate-*
2 *rials, magnets, components and systems for guided or-*
3 *dinance, stealth and drone technologies, interrogating*
4 *and targeting lasers, radar, sonar, and weapons sys-*
5 *tems used by the United States military.*

6 (b) *SURVEY.*—*The Secretary of Commerce shall con-*
7 *duct a survey that—*

8 (1) *measures the economic impact of China’s*
9 *rare earth monopoly on the United States and other*
10 *affected nations to determine the magnitude of eco-*
11 *nomical and intellectual property loss resulting from*
12 *China’s rare earth monopoly; and*

13 (2) *looks beyond gross economic figures of value*
14 *added goods and identifies specific technologies, in-*
15 *dustries, and defense systems that are now primarily*
16 *produced in, or are likely to relocate or migrate to,*
17 *China.*

18 (c) *REPORT.*—*Not later than 1 year after the date of*
19 *the enactment of this Act, the Secretary of Commerce shall*
20 *submit a report to Congress that contains the results of the*
21 *survey conducted under subsection (b). The report shall con-*
22 *tain recommendations on how the United States should—*

23 (1) *initiate direct dialogue with affected nations*
24 *to assess the short- and long-term economic con-*

1 *sequences of China's rare earth monopoly and related*
2 *trade practices; and*

3 *(2) promote cooperative resolutions to facilitate*
4 *partnership structures that will offset imbalances*
5 *caused by China's rare earth monopoly.*

6 **SEC. 5. REPORT ON COMPETITIVENESS OF UNITED STATES**
7 **IN INTERNATIONAL TRADE.**

8 *Not later than 180 days after the date of the enactment*
9 *of this Act, the Secretary of Commerce, acting through the*
10 *Under Secretary for International Trade, shall submit to*
11 *Congress a report that—*

12 *(1) identifies the 20 industries in the United*
13 *States in which United States persons export the most*
14 *goods or services;*

15 *(2) evaluates the competitiveness of the United*
16 *States in such industries in global markets;*

17 *(3) identifies domestic regulatory and policy bar-*
18 *riers to increasing exports by United States persons*
19 *operating in such industries;*

20 *(4) identifies foreign barriers that impede the ac-*
21 *cess of United States persons operating in such indus-*
22 *tries to foreign markets; and*

23 *(5) makes recommendations for legislative ac-*
24 *tion—*

1 (A) to reduce barriers described in para-
2 graphs (3) and (4); and

3 (B) to improve the competitiveness of the
4 United States in these industries in foreign mar-
5 kets.

6 **SEC. 6. NATIONAL STRATEGIC PLAN FOR ADVANCED MANU-**
7 **FACTURING.**

8 Section 102 of the America COMPETES Reauthoriza-
9 tion Act of 2010 (42 U.S.C. 6622) is amended—

10 (1) in subsection (a), by adding at the end the
11 following: “In furtherance of the Committee’s work,
12 the Committee shall consult with the National Eco-
13 nomic Council.”;

14 (2) in subsection (b), by striking paragraph (7)
15 and inserting the following:

16 “(7) develop and update a national strategic
17 plan for advanced manufacturing in accordance with
18 subsection (c).”; and

19 (3) by striking subsection (c) and inserting the
20 following:

21 “(c) NATIONAL STRATEGIC PLAN FOR ADVANCED MAN-
22 UFACTURING.—

23 “(1) IN GENERAL.—The President shall submit
24 to Congress, and publish on an Internet website that

1 *is accessible to the public, the strategic plan developed*
2 *under paragraph (2).*

3 “(2) *DEVELOPMENT.*—*The Committee shall de-*
4 *velop and update as required under paragraph (4), in*
5 *coordination with the National Economic Council, a*
6 *strategic plan to improve Government coordination*
7 *and provide long-term guidance for Federal programs*
8 *and activities in support of United States manufac-*
9 *turing competitiveness, including advanced manufac-*
10 *turing research and development.*

11 “(3) *CONTENTS.*—*The strategic plan described in*
12 *paragraph (2) shall—*

13 “(A) *specify and prioritize near-term and*
14 *long-term objectives, including research and de-*
15 *velopment objectives, the anticipated time frame*
16 *for achieving the objectives, and the metrics for*
17 *use in assessing progress toward the objectives;*

18 “(B) *describe the progress made in achiev-*
19 *ing the objectives from prior strategic plans, in-*
20 *cluding a discussion of why specific objectives*
21 *were not met;*

22 “(C) *specify the role, including the pro-*
23 *grams and activities, of each relevant Federal*
24 *agency in meeting the objectives of the strategic*
25 *plan;*

1 “(D) describe how the Federal agencies and
2 Federally funded research and development cen-
3 ters supporting advanced manufacturing re-
4 search and development will foster the transfer of
5 research and development results into new man-
6 ufacturing technologies and United States based
7 manufacturing of new products and processes for
8 the benefit of society to ensure national, energy,
9 and economic security;

10 “(E) describe how such Federal agencies
11 and centers will strengthen all levels of manufac-
12 turing education and training programs to en-
13 sure an adequate, well-trained workforce;

14 “(F) describe how such Federal agencies
15 and centers will assist small- and medium-sized
16 manufacturers in developing and implementing
17 new products and processes;

18 “(G) analyze factors that impact innovation
19 and competitiveness for United States advanced
20 manufacturing, including—

21 “(i) technology transfer and commer-
22 cialization activities;

23 “(ii) the adequacy of the national secu-
24 rity industrial base;

1 “(iii) the capabilities of the domestic
2 manufacturing workforce;

3 “(iv) export opportunities and trade
4 policies;

5 “(v) financing, investment, and tax-
6 ation policies and practices;

7 “(vi) emerging technologies and mar-
8 kets; and

9 “(vii) advanced manufacturing re-
10 search and development undertaken by com-
11 peting nations; and

12 “(H) elicit and consider the recommenda-
13 tions of a wide range of stakeholders, including
14 representatives from diverse manufacturing com-
15 panies, academia, and other relevant organiza-
16 tions and institutions.

17 “(4) UPDATES.—Not later than May 1, 2018,
18 and not less frequently than once every 4 years there-
19 after, the President shall submit to Congress, and
20 publish on an Internet website that is accessible to the
21 public, an update of the strategic plan submitted
22 under paragraph (1). Such updates shall be developed
23 in accordance with the procedures set forth under this
24 subsection.

1 “(5) *REQUIREMENT TO CONSIDER STRATEGY IN*
2 *THE BUDGET.*—*In preparing the budget for a fiscal*
3 *year under section 1105(a) of title 31, United States*
4 *Code, the President shall include information regard-*
5 *ing the consistency of the budget with the goals and*
6 *recommendations included in the strategic plan devel-*
7 *oped under this subsection applying to that fiscal*
8 *year.*

9 “(6) *AMP STEERING COMMITTEE INPUT.*—*The*
10 *Advanced Manufacturing Partnership Steering Com-*
11 *mittee of the President’s Council of Advisors on*
12 *Science and Technology shall provide input, perspec-*
13 *tive, and recommendations to assist in the develop-*
14 *ment and updates of the strategic plan under this*
15 *subsection.”.*

Calendar No. 547

113TH CONGRESS
2^D SESSION

S. 1468

[Report No. 113-247]

A BILL

To require the Secretary of Commerce to establish the Network for Manufacturing Innovation and for other purposes.

AUGUST 26, 2014

Reported with an amendment