

Calendar No. 671

117TH CONGRESS }
2d Session

SENATE

{ REPORT
117-272

DOMAINS CRITICAL TO HOMELAND
SECURITY ACT

R E P O R T

OF THE

COMMITTEE ON HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS
UNITED STATES SENATE

TO ACCOMPANY

S. 2525

TO AMEND THE HOMELAND SECURITY ACT OF 2002 TO
REQUIRE RESEARCH AND DEVELOPMENT TO IDENTIFY
AND EVALUATE THE EXTENT TO WHICH CRITICAL
DOMAIN RISKS WITHIN THE UNITED STATES SUPPLY
CHAIN POSE A SUBSTANTIAL THREAT TO HOMELAND
SECURITY, AND FOR OTHER PURPOSES



DECEMBER 19, 2022.—Ordered to be printed

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DOMAINS CRITICAL TO HOMELAND SECURITY ACT

DECEMBER 19, 2022.—Ordered to be printed

Mr. PETERS, from the Committee on Homeland Security and
Governmental Affairs, submitted the following

R E P O R T

[To accompany S. 2525]

[Including cost estimate of the Congressional Budget Office]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (S. 2525) to amend the Homeland Security Act of 2002 to require research and development to identify and evaluate the extent to which critical domain risks within the United States supply chain pose a substantial threat to homeland security, and for other purposes, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

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I. PURPOSE AND SUMMARY

S. 2525, the *Domains Critical to Homeland Security Act*, authorizes the Department of Homeland Security (DHS) to study sectors that are critical to the economic and homeland security of the United States. The bill also includes a requirement for DHS to conduct a risk analysis of critical domains to examine if there are present or future homeland security threats in the event that a critical domain is disrupted. Critical domains are defined in the bill as “the critical infrastructure and other associated industries, tech-

nologies, and intellectual property, or any combination thereof, that are essential to the economic security of the United States.” The bill requires the DHS Secretary to publish a report on the supply chain resiliency of critical domains beginning one year after enactment, including findings, evidence, analysis, and recommendations. The report would be updated annually through 2026. The bill also requires the DHS Secretary to submit the report to appropriate congressional committees 90 days after publication, in addition to a description of the actions taken or those intended to be taken by DHS and other federal agencies in response to the annual report. Finally, the bill authorizes \$1,000,000 for each fiscal year starting FY 2022 through FY 2026 in order to implement the provisions of this Act.

II. BACKGROUND AND NEED FOR THE LEGISLATION

In 2020, the DHS Office of Strategy, Policy, and Plans published a report on domains critical to the ongoing operation and growth of the U.S. economy. The 2020 Economic Security Assessment provided a high-level overview of the vulnerabilities in supply chains for materials used in critical industries ranging from pharmaceuticals to microelectronics.¹ This legislation defines critical domains for economic security as the critical infrastructure and other associated industries, technologies, and intellectual property, or any combination thereof, that are essential to our economic security.

Over the last few years, global disruptions related to extreme weather and the COVID–19 pandemic have strained access to, and supplies of, medical and electronic materials that originate in other parts of the world.² A report from the United States Government focused on building resilient supply chains found that the country has favored the prioritization of efficiency and cost at the expense of security, sustainability, and resilience, leading to current supply chain risks. The report asserted that current practices have “undermined the prosperity and health of American workers and the ability to manage natural resources domestically and globally.”³ The pharmaceutical industry, for instance, operates on a “just in time” delivery model, meaning only a limited amount of inventory is procured and stored at a given time.⁴ A 2019 HSGAC Minority Staff report on the prescription drug industry found that 80% of the active pharmaceutical ingredients in drugs sold in the U.S. come from foreign countries, primarily China and India.⁵ The more complex the supply chain, the greater the opportunity for error, making it difficult for manufacturers to obtain active pharmaceutical ingredients during a shortage.⁶

Beyond the individual level, the breakdown of supply chains also threatens the security and stability of the entire country. Our cars,

¹ Department of Homeland Security, Office of Strategy, Policy, and Plans, *2020 Economic Security Assessment* (Jan. 11, 2021).

² The White House, *100-Day Reviews Under Executive Order 14017: Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth* at 6 (June 2021).

³ *Id.* at 7.

⁴ Minority Staff, Senate Committee on Homeland Security and Governmental Affairs, *A Price Too High: Cost, Supply, and Security Threats to Affordable Prescription Drugs* at 32 (2019).

⁵ *Id.*

⁶ *Id.*

trucks, kitchen appliances, mobile devices, satellites, and defensive weapons are powered by semiconductors.⁷ Virtually all semiconductor chips are built in overseas plants that are “susceptible to unplanned disruption, either from natural disasters or geopolitical events, creating a significant strategic liability for America.”⁸ As Chairman Peters has noted, the recent shortages of semiconductor chips and lifesaving medical supplies demonstrate the inherent dangers of overreliance on offshore sources.⁹ Our dependence on foreign suppliers extends to adversaries including China and Russia.¹⁰

To address the fragility of supply chains in the U.S., this bill creates a reporting requirement for DHS to identify and analyze potential threats to critical domains that are essential to our economic and homeland security. The bill requires DHS to publish an annual report on supply chain resiliency in these critical domains, which will identify and prioritize the supply chains most critical to our security to mitigate potential risks.

III. LEGISLATIVE HISTORY

Senators Portman (R–OH) and Peters (D–MI) introduced S. 2525, the *Domains Critical to Homeland Security Act*, on July 28, 2021. The bill was referred to the Senate Committee on Homeland Security and Governmental Affairs.

The Committee considered S. 2525 at a business meeting on August 4, 2021. During the business meeting, Senator Scott offered an amendment that would strike language to authorize \$1 million annually in fiscal years 2022 through 2026 to carry out the bill. The amendment would also require the Homeland Security secretary to use existing funds made available to the secretary to implement the bill and prohibit the authorization of additional funds to implement the bill. The amendment was not adopted by roll call vote with Senators Johnson, Lankford, Scott and Hawley voting in the affirmative, and Senators Peters, Carper, Hassan, Sinema, Rosen, Padilla, Ossoff, Portman and Romney voting in the negative. Senator Paul voted yes by proxy vote.

The Committee ordered the bill reported favorably by voice vote with Senator Scott recorded “No.” Senators present for the vote on the bill were: Peters, Carper, Hassan, Sinema, Rosen, Padilla, Ossoff, Portman, Johnson, Lankford, Romney, Scott, and Hawley.

⁷ Senate Committee on Commerce, Science, and Transportation, Testimony for the Record of Dr. Dario Gil, IBM Research, *Hearing on Implementing Supply Chain Resiliency* (July 15, 2021); Department of Defense, *Securing Defense-Critical Supply Chains* at 32 (Feb. 2022).

⁸ Senate Subcommittee on Surface, Transportation, Maritime, Freight, and Ports, Statement for the Record of Robert J. Rathert, KLA, *Field Hearing on Made in America: The Future of Automotive Innovation and Semiconductor Chips*, 117th Cong. (Mar. 28, 2022).

⁹ Senators Gary Peters and Rob Portman: *Peters & Portman Provision to Direct DHS to Research Supply Chain Vulnerabilities That Threaten National Security Signed into Law as Part of Annual Defense Bill* (Dec. 28, 2021); Also see The White House, *100-Day Reviews Under Executive Order 14017: Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth* at 153 (June 2021).

¹⁰ Department of Homeland Security, *2020 Economic Security Assessment* at 11 (2020); Congressional Research Service, *Renewed Great Power Competition: Implications for Defense—Issues for Congress* at 24 (Mar. 10, 2022).

IV. SECTION-BY-SECTION ANALYSIS OF THE BILL, AS REPORTED

Section 1. Short title

This section designates the name of the bill as the “Domains Critical to Homeland Security Act.”

Section 2. Critical domain research and development

This section specifies the subsection of the Homeland Security Act of 2002 which the bill amends, and provides the language to be inserted in the Homeland Security Act.

The language to be added to the Homeland Security Act authorizes the Secretary of Homeland Security to conduct research and development to identify and evaluate critical domains for homeland security. It further provides specifics on how this research is to be executed, published, and submitted to Congress, as well as definitions for “economic security,” and “United States critical domains for economic security.”

V. EVALUATION OF REGULATORY IMPACT

Pursuant to the requirements of paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee has considered the regulatory impact of this bill and determined that the bill will have no regulatory impact within the meaning of the rules. The Committee agrees with the Congressional Budget Office’s statement that the bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

VI. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, October 25, 2021.

Hon. GARY C. PETERS,
Chairman, Committee on Homeland Security and Governmental Affairs, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 2525, the Domains Critical to Homeland Security Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Lindsay Wylie.

Sincerely,

PHILLIP L. SWAGEL,
Director.

Enclosure.

S. 2525, Domains Critical to Homeland Security Act			
As ordered reported by the Senate Committee on Homeland Security and Governmental Affairs on August 4, 2021			
By Fiscal Year, Millions of Dollars	2022	2022-2026	2022-2031
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	*	3	5
Statutory pay-as-you-go procedures apply?	No	Mandate Effects	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2032?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No
* = between zero and \$500,000.			

S. 2525 would authorize the Department of Homeland Security (DHS) to identify and analyze potential threats to infrastructure, industries, technologies, and intellectual property critical to the economic security of the United States. The agency would be required to report its findings and recommendations to the Congress annually through 2026.

The bill would authorize the appropriation of \$1 million each year from 2022 through 2026 to carry out the new requirements. Using historical patterns of spending for similar programs and assuming appropriation of the authorized amounts, CBO estimates that implementing S. 2525 would cost \$3 million over the 2022–2026 period and \$2 million after 2026.

On June 15, 2021, CBO transmitted a cost estimate for H.R. 3264, the Domains Critical to Homeland Security Act, as ordered reported by the House Committee on Homeland Security on June 1, 2021. That bill is similar to S. 2525, as described above, and CBO’s estimates for the bills are the same.

The CBO staff contact for this estimate is Lindsay Wylie. The estimate was reviewed by Leo Lex, Deputy Director of Budget Analysis.

VII. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows: (existing law proposed to be omitted is enclosed in brackets, new matter is printed in *italics*, and existing law in which no change is proposed is shown in *roman*):

HOMELAND SECURITY ACT OF 2002

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) **SHORT TITLE.**—This Act may be cited as the “Homeland Security Act of 2002”.

(b) **TABLE OF CONTENTS.**—The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.

* * * * *

TITLE VIII—COORDINATION WITH NON-FEDERAL ENTITIES; INSPECTOR GENERAL; UNITED STATES SECRET SERVICE; COAST GUARD; GENERAL PROVISIONS

Subtitle H—Miscellaneous Provisions

* * * * *

Sec. 890B. Homeland security critical domain research and development.

* * * * *

TITLE VIII—COORDINATION WITH NON-FEDERAL ENTITIES; INSPECTOR GENERAL; UNITED STATES SECRET SERVICE; COAST GUARD; GENERAL PROVISIONS

* * * * *

Subtitle H—Miscellaneous Provisions

* * * * *

SEC. 890B. HOMELAND SECURITY CRITICAL DOMAIN RESEARCH AND DEVELOPMENT.

(a) *IN GENERAL.*—

(1) *RESEARCH AND DEVELOPMENT.*—*The Secretary is authorized to conduct research and development to—*

(A) *identify United States critical domains for economic security and homeland security; and*

(B) *evaluate the extent to which disruption, corruption, exploitation, or dysfunction of any such domain poses a substantial threat to homeland security.*

(2) *REQUIREMENTS.*—

(A) *RISK ANALYSIS OF CRITICAL DOMAINS.*—*The research under paragraph (1) shall include a risk analysis of each identified United States critical domain for economic security to determine the degree to which there exists a present or future threat to homeland security in the event of disruption, corruption, exploitation, or dysfunction to such domain. Such research shall consider, to the extent possible, the following:*

(i) *The vulnerability and resilience of relevant supply chains.*

(ii) *Foreign production, processing, and manufacturing methods.*

(iii) *Influence of malign economic actors.*

(iv) *Asset ownership.*

(v) *Relationships within the supply chains of such domains.*

(vi) *The degree to which the conditions referred to in clauses (i) through (v) would place such a domain at risk of disruption, corruption, exploitation, or dysfunction.*

(B) *ADDITIONAL RESEARCH INTO HIGH-RISK CRITICAL DOMAINS.*—*Based on identification and risk analysis of*

United States critical domains for economic security pursuant to paragraph (1) and subparagraph (A) of this paragraph, respectively, the Secretary may conduct additional research into those critical domains, or specific elements thereof, with respect to which there exists the highest degree of a present or future threat to homeland security in the event of disruption, corruption, exploitation, or dysfunction to such a domain. For each such high-risk domain, or element thereof, such research shall—

(i) describe the underlying infrastructure and processes;

(ii) analyze present and projected performance of industries that comprise or support such domain;

(iii) examine the extent to which the supply chain of a product or service necessary to such domain is concentrated, either through a small number of sources, or if multiple sources are concentrated in one geographic area;

(iv) examine the extent to which the demand for supplies of goods and services of such industries can be fulfilled by present and projected performance of other industries, identify strategies, plans, and potential barriers to expand the supplier industrial base, and identify the barriers to the participation of such other industries;

(v) consider each such domain's performance capacities in stable economic environments, adversarial supply conditions, and under crisis economic constraints;

(vi) identify and define needs and requirements to establish supply resiliency within each such domain; and

(vii) consider the effects of sector consolidation, including foreign consolidation, either through mergers or acquisitions, or due to recent geographic realignment, on such industries' performances.

(3) CONSULTATION.—In conducting the research under paragraphs (1) and (2)(B), the Secretary shall consult with appropriate Federal agencies, including the Bureau of Industry and Security at the Department of Commerce, State agencies, and private sector stakeholders.

(4) PUBLICATION.—Beginning 1 year after the date of the enactment of this section, the Secretary shall publish a report containing information relating to the research under paragraphs (1) and (2)(B), including findings, evidence, analysis, and recommendations. Such report shall be updated annually through 2026.

(b) SUBMISSION TO CONGRESS.—Not later than 90 days after the publication of each report required under subsection (a)(4), the Secretary shall transmit to the Committee on Homeland Security of the House of Representatives and the Committee on Homeland Security and Governmental Affairs of the Senate each such report, together with a description of actions the Secretary, in consultation with appropriate Federal agencies, will undertake or has undertaken in response to each such report.

(c) DEFINITIONS.—In this section:

(1) *ECONOMIC SECURITY.*—*The term economic security' means the condition of having secure and resilient domestic production capacity, combined with reliable access to the global resources necessary to maintain an acceptable standard of living and to protect core national values.*

(2) *UNITED STATES CRITICAL DOMAINS FOR ECONOMIC SECURITY.*—*The term 'United States critical domains for economic security' means the critical infrastructure and other associated industries, technologies, and intellectual property, or any combination thereof, that are essential to the economic security of the United States.*

(d) *AUTHORIZATION OF APPROPRIATIONS.*—*There is authorized to be appropriated \$1,000,000 for each of fiscal years 2022 through 2026 to carry out this section.*

* * * * *

