

113TH CONGRESS }  
2d Session }

SENATE

{ REPORT  
113-207

DHS CYBERSECURITY WORKFORCE  
RECRUITMENT AND RETENTION ACT OF  
2014

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R E P O R T

OF THE

COMMITTEE ON HOMELAND SECURITY AND  
GOVERNMENTAL AFFAIRS  
UNITED STATES SENATE

TO ACCOMPANY

S. 2354

TO IMPROVE CYBERSECURITY RECRUITMENT AND RETENTION



JULY 14, 2014.—Ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE

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# Calendar No. 463

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## DHS CYBERSECURITY WORKFORCE RECRUITMENT AND RETENTION ACT OF 2014

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

### R E P O R T

[To accompany S. 2354]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (S. 2354) to improve cybersecurity recruitment and retention, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

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#### I. PURPOSE AND SUMMARY

S. 2354, the DHS Cybersecurity Workforce Recruitment and Retention Act, seeks to strengthen the Department of Homeland Security's (DHS's) cybersecurity workforce. It would enable DHS to better compete for cybersecurity talent by giving the Secretary of Homeland Security greater discretion than currently possessed when hiring and setting the pay and benefits of DHS cybersecurity employees.

#### II. BACKGROUND AND NEED FOR LEGISLATION

Hiring and retaining top cybersecurity talent presents great challenges to the Federal Government. There simply aren't enough spe-

cially trained experts to fill all of the vacant positions in government—a problem that is compounded by the fact that the private sector is also seeking critically needed cybersecurity professionals and can often pay more than the government for that talent.<sup>1</sup>

These personnel challenges occur against the backdrop of an ever increasing and urgent need for cybersecurity experts. Every day, sophisticated criminals and nation states are probing the networks of our government agencies, universities, major retailers, and critical infrastructure, looking for weak spots in our defenses. They seek to exploit these weaknesses to cause disruptions, steal our personal information and trade secrets, or even worse, cause us physical harm. To combat these threats, the Department of Homeland Security has an important cybersecurity mission, including protecting federal networks, working to improve the security and resiliency of critical infrastructure, whether in public or private hands, and investigating and prosecuting cyber criminals.

The Department of Defense is authorized to use a variety of flexible hiring tools to bring on intelligence personnel, including cyber experts, more quickly, as well as provide more competitive compensation, benefits, and incentives.<sup>2</sup> This makes federal service in the area of cybersecurity more attractive. Specifically, the Secretary of Defense may create new positions for cyber personnel, and may hire employees to fill those jobs without using the traditional competitive hiring procedures. In addition, the Secretary has significant latitude in setting the pay and benefits for these new positions, adding on regional and other adjustments to pay, and offering further specific financial incentives. Essentially, these authorities allow the Defense Department and its component agency, the National Security Agency, to hire faster, pay more, and offer retention bonuses. These authorities have enabled the Department of Defense and the National Security Agency to build and maintain a strong cybersecurity workforce.

Recognizing the challenges of hiring and retaining a top-tier cyber workforce, then-Secretary of Homeland Security Napolitano in 2009 asked the Homeland Security Advisory Council, comprised of leaders from state and local government, first responder communities, the private sector, and academia, to study the issue. The group observed in its 2012 report, *Cyberskills Task Force Report*, that “the numbers of professionals with these mission-critical skills are so limited that government contractors and federal agencies compete with one another and the private sector to hire them.”<sup>3</sup>

The Council made a number of recommendations to DHS regarding management and policies for cybersecurity personnel, which the Department is well underway to implementing. The Council also made a recommendation to Congress: “Congress should grant the Department [of Homeland Security] human capital flexibilities in making salary, hiring, promotion and separation decisions identical to those used by the National Security Agency for hiring and

<sup>1</sup> See report from the Government Accountability Office, “Cybersecurity Human Capital: Initiatives Need Better Planning and Coordination” at pages 21–22. (November 29, 2011) <http://www.gao.gov/products/GAO-12-8> (last viewed June 16, 2014).

<sup>2</sup> Codified at 10 U.S.C. §§ 1601–1603.

<sup>3</sup> See report from the Homeland Security Advisory Council, “CyberSkills Task Force Report,” page 2 (November 2012) <http://www.dhs.gov/sites/default/files/publications/HSAC%20CyberSkills%20Report%20-%20Final.pdf> (last viewed June 16, 2014).

managing its cybersecurity workforce and other technical experts.<sup>4</sup>

This bill seeks to do just that: it gives the Secretary of Homeland Security similar recruitment and retention authorities for cybersecurity professionals as currently possessed by the Secretary of Defense. With these tools, DHS will be able to hire at speed and salaries comparable to the Department of Defense. These authorities are needed by DHS to address the ever-growing cyber threat to our national and economic security. The bill would also require the Secretary to report annually on the progress of the program and to ensure adequate transparency and oversight of the recruitment and retention program.

### III. LEGISLATIVE HISTORY

Chairman Carper introduced S. 2354 on May 20, 2014. The bill was referred to the Committee on Homeland Security and Governmental Affairs. The Committee considered S. 2354 at a business meeting on May 21, 2014.

Senator Portman offered one amendment, requiring DHS to categorize its cybersecurity workforce and identify its critical cybersecurity needs and surpluses, and requiring the Government Accountability Office to report on DHS' progress toward implementing these measures. The amendment was adopted, as modified for technical edits, by voice vote on May 21, 2014.

The Committee ordered the bill, as amended, reported favorably by voice vote on May 21, 2014. Senators present for both the vote on the amendment and the vote on the bill were Senators Carper, Pryor, Landrieu, McCaskill, Tester, Begich, Coburn, Johnson, Portman, and Enzi. Senator Landrieu asked to be recorded as voting present on the bill.

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

#### *Section 1. Short title*

This section provides the bill's short title, the "DHS Cybersecurity Workforce Recruitment and Retention Act of 2014."

#### *Section 2. Cybersecurity recruitment and retention*

This section adds a new section to the Homeland Security Act regarding cybersecurity recruitment and retention.

Subsection (a) of the new section of the Homeland Security Act would provide several definitions including for the following terms: "appropriate committees of Congress"; "collective bargaining agreement", "excepted service", "preference eligible", "qualified position", and "senior executive service".

Subsection (b) of the new section of the Homeland Security Act would grant the Secretary of Homeland Security the authority to establish positions in the excepted service as the Secretary determines necessary to carry out the responsibilities of the Department relating to cybersecurity, to appoint individuals to these positions, and fix rates of pay of individuals appointed to these positions. The subsection provides that the Secretary shall fix the rates for pay for positions established under this section in relation to the rates

<sup>4</sup>Id. at page 14.

of pay provided for comparable positions in the Department of Defense. Under the subsection the Secretary could also grant additional compensation, incentives, and allowances consistent with comparable positions authorized by Title 5, United States Code.<sup>5</sup> The subsection provides that within 120 days of enactment of this section, the Secretary shall submit a report to appropriate committees of Congress outlining a plan for the use of the authorities provided under this section.

Subsection (c) of the new section of the Homeland Security Act would require the Secretary to submit an annual report in each of the next four years: (1) regarding the process used for selecting individuals for positions established under the section; (2) describing how the Secretary plans to fulfill the critical need of the Department to recruit and retain employees in qualified positions; (3) providing various metrics on the employees hired in these positions; and (4) describing training provided to supervisors of employees hired in these positions.

Subsection (d) of the new section of the Homeland Security Act would establish a three-year probationary period for all employees hired under this section.

Subsection (e) of the new section of the Homeland Security Act would grant to an individual serving in a position on the date of enactment of this section that is chosen to be converted to a position in the excepted service under this section the right to refuse such conversion.

### *Section 3. Homeland security cybersecurity workforce assessment*

Subsection (a) provides a title for this section, the “Homeland Security Cybersecurity Workforce Assessment Act.”

Subsection (b) provides definitions including for the following terms: “appropriate Congressional committees”, “cybersecurity workforce category”, “data element code”, “specialty area”, “Department”, “Director”, and “Secretary”.

Subsection (c) requires the Secretary to identify and categorize all cybersecurity positions (both open and filled) across the Department, and report to Congress not one year later.

Subsection (d) requires the Secretary to identify areas of critical need for cybersecurity personnel based on the work under subsection (c). The subsection requires the Director of the Office of Personnel Management to provide the Secretary with timely guidance for identifying cybersecurity positions with current and upcoming shortages. The subsection requires the Secretary, in consultation with the Director, to identify specialty areas of critical need for cybersecurity workforce across the Department and submit a progress report.

Subsection (e) requires the Comptroller General of the United States to monitor the implementation of this section and report to Congress not more than three years after enactment of the legislation.

## 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

<sup>5</sup> See, generally, 5 U.S.C. part III.

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

JULY 3, 2014.

Hon. TOM CARPER,  
*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. 2354, the DHS Cybersecurity Workforce Recruitment and Retention Act of 2014.

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

Sincerely,

DOUGLAS W. ELMENDORF.

Enclosure.

### *S. 2354—DHS Cybersecurity Workforce Recruitment and Retention Act of 2014*

Summary: S. 2354 would provide the Department of Homeland Security (DHS) with enhanced authorities to hire and compensate DHS employees who perform roles that are necessary for the department to complete its cybersecurity mission. The bill also would require DHS to identify critical cybersecurity positions within the department that are vacant, and to report annually over the next five years on its efforts to fill those positions. Assuming appropriation of the necessary amounts, CBO estimates that implementing the bill would cost \$104 million over the 2015–2019 period.

Pay-as-you-go procedures do not apply to this legislation because it would not affect direct spending or revenues.

S. 2354 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would not affect the budgets of state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary impact of S. 2354 is shown in the following table. The costs of this legislation fall within budget function 050 (national defense).

	By fiscal year, in millions of dollars—					
	2015	2016	2017	2018	2019	2015-2019
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Estimated Authorization Level .....	0	24	25	26	30	106
Estimated Outlays .....	0	23	25	26	30	104

Note: Numbers may not sum to totals because of rounding.

Basis of estimate: For this estimate, CBO assumes that the bill will be enacted near the beginning of fiscal year 2015 and that spending will follow historical patterns for similar activities.

*DHS Cybersecurity Personnel Authorities*

Section 2 would provide DHS with enhanced authority to hire and compensate DHS employees who perform cybersecurity functions for the department. Under such authority DHS could convert eligible positions into the excepted service and would have expanded flexibility to determine pay and bonuses for employees in those positions. (Excepted service authorities allow for expedited hiring of individuals into federal service by allowing agencies to fill positions without following the procedures, rules, and classifications required for hiring employees into the competitive service.)

The Transportation Security Administration (TSA) has hiring and pay authorities similar to those that would be provided by S. 2354. CBO analyzed data provided by the Office of Personnel Management for TSA employees in the field of information technology management and found that, after accounting for years of service and education, employees in that category earned about 15 percent more at TSA than elsewhere at DHS. On that basis, CBO anticipates that pay for positions established in the excepted service under this proposal would increase by about 15 percent above current levels.

According to DHS, approximately 1,500 employees, mostly in the general schedule grades GS-13, GS-14, and GS-15, would move into a new pay plan for cybersecurity specialists under this provision. However, CBO estimates that 100 of those individuals are in TSA, and would not see a pay increase. For the remaining 1,400 employees, based on the difference in pay and the number and grades of the affected employees, CBO estimates that implementing this provision would cost \$104 million over the 2016–2019 period, assuming appropriation of the necessary amounts.

*Homeland Security Cybersecurity Workforce Assessment*

S. 2354 also would require DHS to identify critical cybersecurity positions within the department that are currently unfilled, and to report annually over the next five years on its efforts to fill such positions. In conducting the analysis and preparing those reports, CBO expects that DHS would be able to draw on its current efforts and utilize several previous reports—such as the National Cybersecurity Workforce Framework, the Information Technology Workforce Assessment for Cybersecurity, and DHS’s Coordinated Recruiting and Outreach Strategy; therefore, we estimate that implementing the new requirements would not have a significant cost.

Pay-As-You-Go Considerations: None.

Intergovernmental and private-sector impact: S. 2354 contains no intergovernmental or private-sector mandates as defined in UMRA.

Estimate prepared by: Federal costs: Jason Wheelock; Impact on state, local, and tribal governments: Melissa Merrell; Impact on the private sector: Elizabeth Bass.

Estimate approved by: Theresa Gullo, Deputy Assistant Director for 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 S. 2354 as reported are shown as follows (existing law proposed to be omitted

is enclosed in brackets, new matter is printed in italic, 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) \* \* \*

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

*	*	*	*	*	*	*
TITLE II—INFORMATION ANALYSIS AND INFRASTRUCTURE PROTECTION						
*	*	*	*	*	*	*
Subtitle C—Information Security						
Sec. 221. Procedures for information sharing.						
*	*	*	*	*	*	*
Sec. 226. <i>Cybersecurity recruitment and retention</i>						
*	*	*	*	*	*	*

## TITLE II—INFORMATION ANALYSIS AND INFRASTRUCTURE PROTECTION

\* \* \* \* \*

### Subtitle C—Information Security

\* \* \* \* \*

### SEC. 226. CYBERSECURITY RECRUITMENT AND RETENTION.

(a) DEFINITIONS.—*In this section:*

(1) APPROPRIATE COMMITTEES OF CONGRESS.—*The term “appropriate committees of Congress” means the Committee on Homeland Security and Governmental Affairs and the Committee on Appropriations of the Senate and the Committee on Homeland Security and the Committee on Appropriations of the House of Representatives.*

(2) COLLECTIVE BARGAINING AGREEMENT.—*The term “collective bargaining agreement” has the meaning given that term in section 7103(a)(8) of title 5, United States Code.*

(3) EXCEPTED SERVICE.—*The term “excepted service” has the meaning given that term in section 2103 of title 5, United States Code.*

(4) PREFERENCE ELIGIBLE.—*The term “preference eligible” has the meaning given that term in section 2108 of title 5, United States Code.*

(5) QUALIFIED POSITION.—*The term “qualified position” means a position, designated by the Secretary for the purpose of this section, in which the incumbent performs, manages, or supervises functions that execute the responsibilities of the Department relating to cybersecurity.*

(6) SENIOR EXECUTIVE SERVICE.—*The term “Senior Executive Service” has the meaning given that term in section 2101a of title 5, United States Code.*

(b) GENERAL AUTHORITY.—

(1) ESTABLISH POSITIONS, APPOINT PERSONNEL, AND FIX RATES OF PAY.—

(A) GENERAL AUTHORITY.—*The Secretary may—*

(i) establish, as positions in the excepted service, such qualified positions in the Department as the Secretary determines necessary to carry out the responsibilities of the Department relating to cybersecurity, including positions formerly identified as—

(I) senior level positions designated under section 5376 of title 5, United States Code; and

(II) positions in the Senior Executive Service;

(ii) appoint an individual to a qualified position (after taking into consideration the availability of preference eligibles for appointment to the position); and

(iii) subject to the requirements of paragraphs (2) and (3), fix the compensation of an individual for service in a qualified position.

(B) CONSTRUCTION WITH OTHER LAWS.—The authority of the Secretary under this subsection applies without regard to the provisions of any other law relating to the appointment, number, classification, or compensation of employees.

(2) BASIC PAY.—

(A) AUTHORITY TO FIX RATES OF BASIC PAY.—In accordance with this section, the Secretary shall fix the rates of basic pay for any qualified position established under paragraph (1) in relation to the rates of pay provided for employees in comparable positions in the Department of Defense and subject to the same limitations on maximum rates of pay established for such employees by law or regulation.

(B) PREVAILING RATE SYSTEMS.—The Secretary may, consistent with section 5341 of title 5, United States Code, adopt such provisions of that title as provide for prevailing rate systems of basic pay and may apply those provisions to qualified positions for employees in or under which the Department may employ individuals described by section 5342(a)(2)(A) of that title.

(3) ADDITIONAL COMPENSATION, INCENTIVES, AND ALLOWANCES.—

(A) ADDITIONAL COMPENSATION BASED ON TITLE 5 AUTHORITIES.—The Secretary may provide employees in qualified positions compensation (in addition to basic pay), including benefits, incentives, and allowances, consistent with, and not in excess of the level authorized for, comparable positions authorized by title 5, United States Code.

(B) ALLOWANCES IN NONFOREIGN AREAS.—An employee in a qualified position whose rate of basic pay is fixed under paragraph (2)(A) shall be eligible for an allowance under section 5941 of title 5, United States Code, on the same basis and to the same extent as if the employee was an employee covered by such section 5941, including eligibility conditions, allowance rates, and all other terms and conditions in law or regulation.

(4) PLAN FOR EXECUTION OF AUTHORITIES.—Not later than 120 days after the date of enactment of this section, the Secretary shall submit a report to the appropriate committees of Congress with a plan for the use of the authorities provided under this subsection.

(5) *COLLECTIVE BARGAINING AGREEMENTS.*—Nothing in paragraph (1) may be construed to impair the continued effectiveness of a collective bargaining agreement with respect to an office, component, subcomponent, or equivalent of the Department that is a successor to an office, component, subcomponent, or equivalent of the Department covered by the agreement before the succession.

(6) *REQUIRED REGULATIONS.*—The Secretary, in coordination with the Director of the Office of Personnel Management, shall prescribe regulations for the administration of this section.

(c) *ANNUAL REPORT.*—Not later than 1 year after the date of enactment of this section, and every year thereafter for 4 years, the Secretary shall submit to the appropriate committees of Congress a detailed report that—

(1) discusses the process used by the Secretary in accepting applications, assessing candidates, ensuring adherence to veterans' preference, and selecting applicants for vacancies to be filled by an individual for a qualified position;

(2) describes—

(A) how the Secretary plans to fulfill the critical need of the Department to recruit and retain employees in qualified positions;

(B) the measures that will be used to measure progress; and

(C) any actions taken during the reporting period to fulfill such critical need;

(3) discusses how the planning and actions taken under paragraph (2) are integrated into the strategic workforce planning of the Department;

(4) provides metrics on actions occurring during the reporting period, including—

(A) the number of employees in qualified positions hired by occupation and grade and level or pay band;

(B) the placement of employees in qualified positions by directorate and office within the Department;

(C) the total number of veterans hired;

(D) the number of separations of employees in qualified positions by occupation and grade and level or pay band;

(E) the number of retirements of employees in qualified positions by occupation and grade and level or pay band; and

(F) the number and amounts of recruitment, relocation, and retention incentives paid to employees in qualified positions by occupation and grade and level or pay band; and

(5) describes the training provided to supervisors of employees in qualified positions at the Department on the use of the new authorities.

(d) *THREE-YEAR PROBATIONARY PERIOD.*—The probationary period for all employees hired under the authority established in this section shall be 3 years.

(e) *INCUMBENTS OF EXISTING COMPETITIVE SERVICE POSITIONS.*—

(1) *IN GENERAL.*—An individual serving in a position on the date of enactment of this section that is selected to be converted to a position in the excepted service under this section shall have the right to refuse such conversion.

(2) *SUBSEQUENT CONVERSION.*—After the date on which an individual who refuses a conversion under paragraph (1) stops serving in the position selected to be converted, the position may be converted to a position in the excepted service.

\* \* \* \* \*

**TITLE 5, UNITED STATES CODE**

\* \* \* \* \*

**PART III—EMPLOYEES**

\* \* \* \* \*

**Subpart B—Employment and Retention**

\* \* \* \* \*

**CHAPTER 31—AUTHORITY FOR EMPLOYMENT**

\* \* \* \* \*

**Subchapter II—The Senior Executive Service**

\* \* \* \* \*

**§ 3132. Definitions and exclusions**

(a) FOR THE PURPOSE OF THIS SUBCHAPTER.—

(1) \* \* \*

\* \* \* \* \*

(2) “Senior Executive Service position” means any position in an agency which is classified above GS–15 pursuant to section 5108 or in level IV or V of the Executive Schedule, or an equivalent position, which is not required to be filled by an appointment by the President by and with the advice and consent of the Senate, and in which an employee—

(A) \* \* \*

\* \* \* \* \*

but does not include—

(i) any position in the Foreign Service of the United States; **[or]**

(ii) an administrative law judge position under section 3105 of this title; *or*

(iii) *any position established as a qualified position in the excepted service by the Secretary of Homeland Security under section 226 of the Homeland Security Act of 2002;*

\* \* \* \* \*

