Union Calendar No. 496

110TH CONGRESS 2D SESSION

H. R. 5983

[Report No. 110-777]

To amend the Homeland Security Act of 2002 to enhance the information security of the Department of Homeland Security, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

May 7, 2008

Mr. Langevin (for himself and Mr. Thompson of Mississippi) introduced the following bill; which was referred to the Committee on Homeland Security

July 24, 2008

Additional sponsors: Ms. Jackson-Lee of Texas, Mr. Bishop of New York, Mr. Carson, and Ms. Harman

July 24, 2008

Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in italic] [For text of introduced bill, see copy of bill as introduced on May 7, 2008]

A BILL

To amend the Homeland Security Act of 2002 to enhance the information security of the Department of Homeland Security, 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,

SECTION 1. SHORT TITLE.

2	This Act may be cited as the "Homeland Security Net-
3	work Defense and Accountability Act of 2008".
4	SEC. 2. AUTHORITY OF CHIEF INFORMATION OFFICER;
5	QUALIFICATIONS FOR APPOINTMENT.
6	Section 703(a) of the Homeland Security Act of 2002
7	(6 U.S.C. 343(a)) is amended—
8	(1) by inserting before the first sentence the fol-
9	lowing:
10	"(1) Authorities and duties.—The Secretary
11	shall delegate to the Chief Information Officer such
12	authority necessary for the development, approval,
13	implementation, integration, and oversight of policies,
14	procedures, processes, activities, funding, and systems
15	of the Department relating to the management of in-
16	formation and information infrastructure for the De-
17	partment, including the management of all related
18	mission applications, information resources, and per-
19	sonnel.
20	"(2) LINE AUTHORITY.—"; and
21	(2) by adding at the end the following new para-
22	graphs:
23	"(3) Qualifications for appointment.—An
24	individual may not be appointed as Chief Informa-
25	tion Officer unless the individual has—

1	"(A) demonstrated ability in and knowledge
2	of information technology and information secu-
3	rity; and
4	"(B) not less than 5 years of executive lead-
5	ership and management experience in informa-
6	tion technology and information security in the
7	public or private sector.
8	"(4) Functions.—The Chief Information Officer
9	shall—
10	"(A) establish and maintain an incident re-
11	sponse team that provides a continuous, real-
12	time capability within the Department of Home-
13	land Security to—
14	"(i) detect, respond to, contain, inves-
15	tigate, attribute, and mitigate any com-
16	puter incident, as defined by the National
17	Institute of Standards and Technology, that
18	could violate or pose an imminent threat of
19	violation of computer security policies, ac-
20	ceptable use policies, or standard security
21	practices of the Department; and
22	"(ii) deliver timely notice of any inci-
23	dent to individuals responsible for informa-
24	tion infrastructure of the Department, and

1	to the United States Computer Emergency
2	$Readiness\ Team;$
3	"(B) establish, maintain, and update a net-
4	work architecture, including a diagram detailing
5	how security controls are positioned throughout
6	the information infrastructure of the Department
7	to maintain the confidentiality, integrity, avail-
8	ability, accountability, and assurance of elec-
9	tronic information; and
10	"(C) ensure that vulnerability assessments
11	are conducted on a regular basis for any Depart-
12	ment information infrastructure connected to the
13	Internet or another external network, and that
14	vulnerabilities are mitigated in a timely fash-
15	ion.".
16	SEC. 3. ATTACK-BASED TESTING PROTOCOLS.
17	Section 703 of the Homeland Security Act of 2002 (6
18	U.S.C. 343) is amended by adding at the end the following
19	new subsection:
20	"(c) Attack-Based Testing Protocols.—The Chief
21	Information Officer, in consultation with the Inspector
22	General, the Assistant Secretary for Cybersecurity, and the
23	heads of other appropriate Federal agencies, shall—
24	"(1) establish security control testing protocols
25	that ensure that the Department's information infra-

1	structure is effectively protected against known at-
2	tacks against and exploitations of Federal and con-
3	$tractor\ information\ infrastructure;$
4	"(2) oversee the deployment of such protocols
5	throughout the information infrastructure of the De-
6	partment; and
7	"(3) update such protocols on a regular basis.".
8	SEC. 4. INSPECTOR GENERAL REVIEWS OF INFORMATION
9	INFRASTRUCTURE.
10	Section 703 of the Homeland Security Act of 2002 (6
11	U.S.C. 343) is further amended by adding at the end the
12	following new subsection:
13	"(d) Inspector General Reviews.—
14	"(1) In General.—The Inspector General of the
15	Department shall use authority under the Inspector
16	General Act of 1978 (5 App. U.S.C.) to conduct an-
17	nounced and unannounced performance reviews and
18	programmatic reviews of the information infrastruc-
19	ture of the Department to determine the effectiveness
20	of security policies and controls of the Department.
21	"(2) Performance re-
22	views under this subsection shall test and validate a
23	system's security controls using the protocols created
24	under subsection (c), beginning not later than 270
25	days after the date of enactment of the Homeland Se-

1	curity Network Defense and Accountability Act of
2	2008.
3	"(3) Programmatic reviews.—Programmatic
4	reviews under this subsection shall—
5	"(A) determine whether an agency of the
6	Department is complying with policies, proc-
7	esses, and procedures established by the Chief In-
8	formation Officer; and
9	"(B) focus on risk assessment, risk manage-
10	ment, and risk mitigation, with primary regard
11	to the implementation of best practices such as
12	authentication, access control (including remote
13	access), intrusion detection and prevention, data
14	protection and integrity, and any other controls
15	that the Inspector General considers necessary.
16	"(4) Information Security Report.—The In-
17	spector General shall submit a security report con-
18	taining the results of each review under this sub-
19	section and prioritized recommendations for improv-
20	ing security controls based on that review, including
21	recommendations regarding funding changes and per-
22	sonnel management, to—
23	"(A) the Secretary;
24	"(B) the Chief Information Officer; and

1	"(C) the head of the Department component
2	that was the subject of the review, and other ap-
3	propriate individuals responsible for the infor-
4	mation infrastructure of such agency.
5	"(5) Corrective action report.—
6	"(A) In General.—Within 60 days after
7	receiving a security report under paragraph (4),
8	the head of the Department component that was
9	the subject of the review and the Chief Informa-
10	tion Officer shall jointly submit a corrective ac-
11	tion report to the Secretary and the Inspector
12	General.
13	"(B) Contents.—The corrective action re-
14	port—
15	"(i) shall contain a plan for address-
16	ing recommendations and mitigating
17	vulnerabilities contained in the security re-
18	port, including a timeline and budget for
19	implementing such plan; and
20	"(ii) shall note any matters in dis-
21	agreement between the head of the Depart-
22	ment component and the Chief Information
23	Officer.
24	"(6) Reports to congress.—

1	"(A) Annual reports.—In conjunction
2	with the reporting requirements of section 3545
3	of title 44, United States Code, the Inspector
4	General shall submit an annual report to the
5	Committee on Homeland Security of the House
6	of Representatives and the Committee on Home-
7	land Security and Governmental Affairs of the
8	Senate—
9	"(i) summarizing the performance and
0	programmatic reviews performed during the
1	preceding fiscal year, the results of those re-
2	views, and any actions that remain to be
13	taken under plans included in corrective ac-
4	tion reports under paragraph (5); and
5	"(ii) describing the effectiveness of the
6	testing protocols developed under subsection
7	(c) in reducing successful exploitations of
8	the Department's information infrastruc-
9	ture.
20	"(B) Security reports and corrective
21	ACTION REPORTS.—The Inspector General shall
22	make all security reports and corrective action
23	reports available to any member of the Com-
24	mittee on Homeland Security of the House of

Representatives, any member of the Committee

1	on Homeland Security and Governmental Af-
2	fairs of the Senate, and the Comptroller General
3	of the United States, upon request.".
4	SEC. 5. INFORMATION INFRASTRUCTURE DEFINED.
5	Section 703 of the Homeland Security Act of 2002 (6
6	U.S.C. 343) is further amended by adding at the end the
7	following:
8	"(e) Information Infrastructure Defined.—In
9	this section, the term 'information infrastructure' means
10	systems and assets used in processing, transmitting, receiv-
11	ing, or storing information electronically.".
12	SEC. 6. NETWORK SERVICE PROVIDERS.
13	(a) In General.—Subtitle D of title VIII of the
14	Homeland Security Act of 2002 (6 U.S.C. 391 et seq.) is
15	amended by adding at the end the following new section:
16	"SEC. 836. REQUIREMENTS FOR NETWORK SERVICE PRO-
17	VIDERS.
18	"(a) Compatibility Determination.—
19	"(1) In general.—Before entering into or re-
20	newing a covered contract, the Secretary, acting
21	through the Chief Information Officer, must deter-
22	mine that the contractor has an internal information
23	systems security policy that complies with the De-
24	partment's information security requirements for risk
25	assessment, risk management, and risk mitigation,

- with primary regard to the implementation of best practices such as authentication, access control (including remote access), intrusion detection and prevention, data protection and integrity, and any other policies that the Secretary considers necessary to ensure the security of the Department's information infrastructure.
- 6 "(2) LIMITATION ON PUBLIC DISCLOSURES.—The
 9 Chief Information Officer shall not disclose to the
 10 public any information provided for purposes of such
 11 determination, notwithstanding any other provision
 12 of Federal, State, or local law, including section 552
 13 of title 5, United States Code.
- "(b) Contract Requirements Regarding SecuRITY.—The Secretary shall include in each covered contract
 provisions requiring the contractor to—
- "(1) implement and regularly update the internal information systems security policy required under subsection (a);
- 20 "(2) maintain the capability to provide con-21 tracted services on a continuing and ongoing basis to 22 the Department in the event of unplanned or disrup-23 tive event; and
- 24 "(3) deliver timely notice of any internal com-25 puter incident, as defined by the National Institute of

- Standards and Technology, that could violate or pose 1 2 an imminent threat of violation of computer security 3 policies, acceptable use policies, or standard security 4 practices at the Department, to the United States 5 Computer Emergency Readiness Team and the inci-6 dent response teamestablished under section 7 703(a)(4).
- 8 "(c) Contract Requirements Regarding Subcon-9 tracting.—The Secretary shall include in each covered 10 contract—
 - "(1) a requirement that the contractor develop and implement a plan for the award of subcontracts, as appropriate, to small business concerns and disadvantaged business concerns in accordance with other applicable requirements, including the terms of such plan, as appropriate; and
 - "(2) a requirement that the contractor submit to the Secretary, during performance of the contract, periodic reports describing the extent to which the contractor has complied with such plan, including specification (by total dollar amount and by percentage of the total dollar value of the contract) of the value of subcontracts awarded at all tiers of subcontracting to small business concerns, including socially and economically disadvantaged small businesses con-

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- 1 cerns, small business concerns owned and controlled
- 2 by service-disabled veterans, HUBZone small business
- 3 concerns, small business concerns eligible to be award-
- 4 ed contracts pursuant to section 8(a) of the Small
- 5 Business Act (15 U.S.C. 637(a)), and Historically
- 6 Black Colleges and Universities and Hispanic-serving
- 7 institutions, tribal colleges and universities, and other
- 8 *minority institutions.*
- 9 "(d) Existing Contracts.—The Secretary shall, to
- 10 the extent practicable under the terms of existing contracts,
- 11 require each contractor who provides covered information
- 12 services under a contract in effect on the date of the enact-
- 13 ment of the Homeland Security Network Defense and Ac-
- 14 countability Act of 2008 to comply with the requirements
- 15 described in subsection (b).
- 16 "(e) Definitions.—For purposes of this section:
- 17 "(1) Socially and Economically disadvan-
- 18 TAGED SMALL BUSINESSES CONCERN, SMALL BUSI-
- 19 NESS CONCERN OWNED AND CONTROLLED BY SERV-
- 20 ICE-DISABLED VETERANS, AND HUBZONE SMALL BUSI-
- 21 NESS CONCERN.—The terms 'socially and economi-
- cally disadvantaged small businesses concern', 'small
- business concern owned and controlled by service-dis-
- abled veterans', and 'HUBZone small business con-

- 1 cern' have the meanings given such terms under the 2 Small Business Act (15 U.S.C. 631 et seq.).
 - "(2) Contractor.—The term 'contractor' includes each subcontractor of a contractor.
 - "(3) COVERED CONTRACT.—The term 'covered contract' means a contract entered into or renewed after the date of the enactment of the Homeland Security Network Defense and Accountability Act of 2008 for the provision of covered information services.
 - "(4) COVERED INFORMATION SERVICES.—The term 'covered information services' means creation, management, maintenance, control, or operation of information networks or Internet Web sites for the Department.
 - "(5) HISTORICALLY BLACK COLLEGES AND UNI-VERSITIES.—The term 'Historically Black Colleges and Universities' means part B institutions under title III of the Higher Education Act of 1965 (20 U.S.C. 1061).
 - "(6) HISPANIC-SERVING INSTITUTION.—The term 'Hispanic-serving institution' has the meaning given such term under title V of the Higher Education Act of 1965 (20 U.S.C. 1101a(a)(5)).

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1	"(7) Information infrastructure.—The term
2	'information infrastructure' has the meaning that
3	term has under section 703.
4	"(8) Tribal colleges and universities.—
5	The term 'tribal colleges and universities' has the
6	meaning given such term under the Tribally Con-
7	trolled College or University Assistance Act of 1978
8	(25 U.S.C. 1801 et seq.).".
9	(b) Clerical Amendment.—The table of contents in
10	section 1(b) of such Act is amended by inserting after the
11	item relating to section 835 the following new item:
	"Sec. 836. Requirements for network service providers.".
12	(c) Report.—Within 90 days after the date of enact-
13	ment of this Act, the Secretary of Homeland Security shall
14	transmit to the Committee on Homeland Security of the
15	House of Representatives and the Homeland Security and
16	Governmental Affairs Committee of the Senate a report de-
17	scribing—
18	(1) the progress in implementing requirements
19	issued by the Office of Management and Budget for
20	encryption, authentication, Internet Protocol version
21	6, and Trusted Internet Connections, including a
22	$timeline\ for\ completion;$
23	(2) a plan, including an estimated budget and a
24	timeline, to investigate breaches against the Depart-
25	ment of Homeland Security's information infrastruc-

1	ture for purposes of counterintelligence assessment, at-
2	tribution, and response;

- (3) a proposal to increase threat information sharing with cleared and uncleared contractors and provide specialized damage assessment training to private sector information security professionals; and
- (4) a process to coordinate the Department of Homeland Security's information infrastructure protection activities.

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