114TH CONGRESS 1ST SESSION

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To codify mechanisms for enabling cybersecurity threat indicator sharing between private and government entities, as well as among private entities, to better protect information systems.

IN THE SENATE OF THE UNITED STATES

Mr. CARPER introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

- To codify mechanisms for enabling cybersecurity threat indicator sharing between private and government entities, as well as among private entities, to better protect information systems.
 - 1 Be it enacted by the Senate and House of Representa-
 - 2 tives of the United States of America in Congress assembled,

3 SECTION 1. SHORT TITLE.

- 4 This Act may be cited as the "Cyber Threat Sharing
- 5 Act of 2015".

1	2 SEC. 2. CYBER THREAT INDICATOR SHARING.
2	(a) IN GENERAL.—Subtitle C of title II of the Home-
3	land Security Act of 2002 (6 U.S.C. 141 et seq.) is amend-
4	ed by adding at the end the following:
5	"SEC. 229. CYBER THREAT INDICATOR SHARING.
6	"(a) DEFINITIONS.—In this section, the following
7	definitions shall apply:
8	"(1) CENTER.—The term 'Center' means the
9	national cybersecurity and communications integra-
10	tion center established under the second section des-
11	ignated as section 226.
12	"(2) CYBER THREAT.—The term 'cyber
13	threat'—
14	"(A) means any action that may result
15	in—
16	"(i) unauthorized access in order to
17	damage or impair the integrity, confiden-
18	tiality, or availability of an information
19	system; or
20	"(ii) unauthorized exfiltration, dele-
21	tion, or manipulation of information that is
22	stored on, processed by, or transiting an
23	information system; and
24	"(B) does not include exceeding authorized
25	access of an information system, if such access

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1	solely involves a violation of consumer terms of
2	service or consumer licensing agreements.
3	"(3) Cyber threat indicator.—The term
4	'cyber threat indicator' means information—
5	"(A) that is necessary to indicate, describe,
6	or identify—
7	"(i) malicious reconnaissance, includ-
8	ing communications that reasonably ap-
9	pear to be transmitted for the purpose of
10	gathering technical information related to
11	a cyber threat;
12	"(ii) a method of defeating a technical
13	control or an operational control;
14	"(iii) a technical vulnerability;
15	"(iv) a method of causing a user with
16	legitimate access to an information system
17	or information that is stored on, processed
18	by, or transiting an information system in-
19	advertently to enable the defeat of a tech-
20	nical control or an operational control;
21	"(v) malicious cyber command and
22	control; or
23	"(vi) any combination of clauses (i)
24	through (v); and

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1	"(B) from which reasonable efforts have
2	been made to remove information that may be
3	used to identify specific persons reasonably be-
4	lieved to be unrelated to the cyber threat.
5	"(4) FEDERAL ENTITY.—The term 'Federal en-
6	tity' means—
7	"(A) an agency or department of the
8	United States; or
9	"(B) any component, officer, employee, or
10	agent of such an agency or department, acting
11	in his or her official capacity.
12	"(5) GOVERNMENTAL ENTITY.—The term 'gov-
13	ernmental entity' means—
14	"(A) any Federal entity;
15	"(B) any agency or department of a State,
16	local, tribal, or territorial government; or
17	"(C) any component, officer, employee, or
18	agent of such an agency or department, acting
19	in his or her official capacity.
20	"(6) Information sharing and analysis or-
21	GANIZATION.—The term 'Information Sharing and
22	Analysis Organization' has the meaning given that
23	term in section 212.
24	"(7) INFORMATION SYSTEM.—The term "infor-
25	mation system' means a discrete set of hardware

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and software information resources that collects,
 processes, maintains, uses, shares, disseminates, or
 disposes of information and communications.

"(8) Malicious Cyber command and con-4 5 TROL.—The term 'malicious cyber command and 6 control' means a method for remote identification of, 7 access to, or use of, an information system or infor-8 mation that is stored on, processed by, or transiting 9 an information system that is known or reasonably 10 suspected of being associated with a known or sus-11 pected cyber threat.

12 "(9) MALICIOUS RECONNAISSANCE.—The term 13 'malicious reconnaissance' means a method for 14 probing or monitoring an information system for the 15 purpose of discerning technical vulnerabilities of the 16 information system, if such method is known or rea-17 sonably suspected of being associated with a known 18 or suspected cyber threat.

19 "(10) NON-FEDERAL ENTITY.—The term 'non20 Federal entity' means a private entity or a govern21 mental entity other than a Federal entity.

"(11) OPERATIONAL CONTROL.—The term
"operational control' means a security control for an
information system that is primarily implemented
and executed by people.

1	"(12) PRIVATE ENTITY.—The term 'private en-
2	tity'—
3	"(A) has the meaning given the term 'per-
4	son' in section 1 of title 1, United States Code;
5	and
6	"(B) does not include a governmental enti-
7	ty or a foreign government, or any component
8	thereof.
9	"(13) Sector-specific agency.—The term
10	'sector-specific agency' has the meaning given that
11	term in section 2(e) of the National Institute of
12	Standards and Technology Act (15 U.S.C. 272(e)).
13	"(14) TECHNICAL CONTROL.—The term 'tech-
14	nical control' means a hardware or software restric-
15	tion on, or audit of, access or use of an information
16	system or information that is stored on, processed
17	by, or transiting an information system that is in-
18	tended to ensure the confidentiality, integrity, or
19	availability of that information system or the infor-
20	mation processed or stored by that information sys-
21	tem.
22	"(15) TECHNICAL VULNERABILITY.—The term
23	'technical vulnerability' means any attribute of hard-
24	ware, firmware, or software that could enable or fa-
25	cilitate the defeat of a technical control.

1	"(b) Voluntary Disclosure and Receipt of
2	Cyber Threat Indicators.—
3	"(1) IN GENERAL.—Notwithstanding any other
4	provision of law, a private entity may—
5	"(A) disclose a lawfully obtained cyber
6	threat indicator to—
7	"(i) a private Information Sharing
8	and Analysis Organization; and
9	"(ii) the Center; and
10	"(B) receive a cyber threat indicator dis-
11	closed under this section by a Federal or non-
12	Federal entity.
13	"(2) Voluntary sharing with law en-
14	FORCEMENT.—Any entity may disclose a lawfully
15	obtained cyber threat indicator to a Federal entity
16	for investigative purposes consistent with the lawful
17	authorities of the Federal entity.
18	"(3) USE AND PROTECTION OF INFORMA-
19	TION.—A private entity that discloses or receives a
20	cyber threat indicator under paragraph (1)—
21	"(A) may only use, retain, or further dis-
22	close the cyber threat indicator for the purpose
23	of—
24	"(i) protecting an information system
	(i) protecting an information system

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1	by, or transiting an information system
2	from cyber threats;
3	"(ii) identifying or mitigating such
4	cyber threats; or
5	"(iii) reporting a crime;
6	"(B) shall take reasonable efforts—
7	"(i) to minimize information that may
8	be used to identify specific persons and is
9	reasonably believed to be unrelated to a
10	cyber threat; and
11	"(ii) to safeguard information that
12	may be used to identify specific persons
13	from unintended disclosure and unauthor-
14	ized access or acquisition; and
15	"(C) shall comply with reasonable restric-
16	tions that a private entity places on the subse-
17	quent disclosure or retention of a cyber threat
18	indicator that the private entity discloses to
19	other private entities.
20	"(4) BEST PRACTICES FOR PRIVATE INFORMA-
21	TION SHARING AND ANALYSIS ORGANIZATIONS.—
22	The Secretary, in consultation with the Secretary of
23	Commerce, the Attorney General, the Director of the
24	Office of Management and Budget, and the heads of

1	sector-specific agencies and other appropriate Fed-
2	eral agencies, shall—
3	"(A) through an open and competitive
4	process, select a private entity to identify a
5	common set of best practices for the creation
6	and operation of private Information Sharing
7	and Analysis Organizations; or
8	"(B) if necessary, develop through an open
9	and consultative process the common set of best
10	practices described in subparagraph (A).
11	"(c) Federal Cyber Threat Indicator Shar-
12	ING.—
13	"(1) CIVILIAN PORTAL.—The Secretary shall
14	designate the Center to receive and disclose cyber
15	threat indicators to Federal and non-Federal entities
16	in as close to real time as practicable, consistent
17	with, and in accordance with the purposes of, this
18	section.
19	"(2) Sharing with non-federal enti-
20	TIES.—
21	"(A) IN GENERAL.—To protect informa-
22	tion systems or information that is stored on,
23	processed by, or transiting an information sys-
24	tem from cyber threats, the Secretary shall co-
25	ordinate Federal efforts to ensure that useful

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1	classified and unclassified cyber threat indica-
2	tors are shared in a timely manner with non-
3	Federal entities.
4	"(B) Report.—
5	"(i) IN GENERAL.—Not later than 1
6	year after the date of enactment of this
7	section, and every year thereafter for 2
8	years, the Secretary, in consultation with
9	the Attorney General, the Director of the
10	Office of Management and Budget, the Di-
11	rector of National Intelligence, the Sec-
12	retary of Defense, and the heads of sector-
13	specific agencies and other appropriate
14	Federal agencies, shall submit to Congress
15	a report including—
16	"(I) a review of all Federal ef-
17	forts to share classified and unclassi-
18	fied cyber threat indicators to protect
19	information systems from cyber
20	threats, including summaries of the
21	nature of those efforts and the quan-
22	tities of information shared;
23	"(II) challenges to the appro-
24	priate sharing of cyber threat indica-
25	tors; and

1	"(III) recommendations to en-
2	hance the appropriate sharing of
3	cyber threat indicators.
4	"(ii) FORM OF REPORT.—Each report
5	submitted under clause (i) shall be in un-
6	classified form, but may include a classi-
7	fied annex.
8	"(3) Sharing among federal entities.—
9	"(A) IN GENERAL.—The Secretary, in con-
10	sultation with the heads of appropriate agen-
11	cies, shall coordinate and establish procedures
12	for the sharing of cyber threat indicators
13	among Federal agencies, with appropriate con-
14	sideration of privacy and civil liberties and
15	agency equities.
16	"(B) Sharing by the center.—The
17	Secretary, in consultation with the Attorney
18	General, the Director of the Office of Manage-
19	ment and Budget, the Director of National In-
20	telligence, the Secretary of Defense, and the
21	heads of sector-specific agencies and other ap-
22	propriate Federal agencies, shall ensure that
23	cyber threat indicators received and disclosed
24	by the Center under paragraph (1) are shared

1	with other Federal entities in as close to real
2	time as practicable.
3	"(4) Real time sharing.—
4	"(A) IN GENERAL.—The Secretary, in co-
5	ordination with the Director of the National In-
6	stitute for Standards and Technology, and con-
7	sistent with the Cybersecurity Enhancement
8	Act of 2014 (Public Law 113–274; 128 Stat.
9	2971), shall develop a program that supports
10	and rapidly advances the development, adop-
11	tion, and implementation of automated mecha-
12	nisms for the real time sharing of cyber threat
13	indicators.
14	"(B) BEST PRACTICES.—To the maximum
15	extent feasible, the Secretary shall ensure that
16	the program developed under subparagraph (A)
17	relies on open source software development best
18	practices.
19	"(d) LIMITATION OF LIABILITY.—
20	"(1) LIABILITY FOR DISCLOSURE OF CYBER
21	THREAT INDICATORS.—
22	"(A) IN GENERAL.—A civil or criminal ac-
23	tion may not be filed or maintained in a Fed-
24	eral or State court against an entity for the vol-
25	untary disclosure or receipt under this section

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1	of a lawfully obtained cyber threat indicator,
2	that the entity was not otherwise required to
3	disclose, to or from—
4	"(i) the Center; or
5	"(ii) a private Information Sharing
6	and Analysis Organization, if the organiza-
7	tion maintains a publicly-available self-cer-
8	tification that the organization has adopted
9	the best practices identified or developed
10	under subsection $(b)(4)$.
11	"(B) EFFECTIVE DATE.—Subparagraph
12	(A) shall take effect on the date on which the
13	policies and procedures are developed under
14	subsection $(e)(1)$.
15	"(2) PROTECTION FROM PUBLIC DISCLO-
16	SURE.—
17	"(A) IN GENERAL.—A cyber threat indi-
18	cator that is submitted by a non-Federal entity
19	to the Center shall be exempt from disclosure
20	under—
21	"(i) section $552(b)(3)$ of title 5,
22	United States Code;
23	"(ii) section 552a(d) of title 5, United
24	States Code; and

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1	"(iii) any State law otherwise requir-
2	ing disclosure.
3	"(B) Application of section 214.—
4	"(i) IN GENERAL.—Except as pro-
5	vided under clause (ii), a cyber threat indi-
6	cator that is submitted by a non-Federal
7	entity to the Center shall be treated in the
8	same manner as voluntarily submitted crit-
9	ical infrastructure information is treated
10	under section 214.
11	"(ii) Exception.—For purposes of
12	clause (i), the requirements under sub-
13	section $(a)(2)$ (regarding an express state-
14	ment) and subsection $(e)(2)(A)$ (regarding
15	acknowledgment of receipt) of section 214
16	shall not apply.
17	"(3) LIMITATION OF REGULATORY ENFORCE-
18	MENT ACTIONS.—
19	"(A) IN GENERAL.—A Federal entity may
20	not use a cyber threat indicator received under
21	this section as evidence in a regulatory enforce-
22	ment action against an entity that disclosed the
23	cyber threat indicator to the Federal Govern-
24	ment under subsection (c).

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1 "(B) EXCEPTION.—Nothing in subpara-2 graph (A) shall be construed to prevent a Fed-3 eral entity from using a cyber threat indicator 4 received through lawful means other than under 5 this section as evidence in a regulatory enforce-6 ment action, even if the Federal entity also re-7 ceives the cyber threat indicator under this sec-8 tion. 9 "(4) RULE OF CONSTRUCTION.—Nothing in 10 this section shall be construed to prohibit or other-11 wise limit an Information Sharing and Analysis Or-12 ganization, information sharing and analysis center, 13 or other non-Federal entity from self-certifying

under paragraph (1)(A)(ii) that the entity has
adopted the best practices identified or developed
under subsection (b)(4).

17 "(e) PRIVACY PROTECTIONS.—

18 "(1) POLICIES AND PROCEDURES.—

"(A) IN GENERAL.—The Secretary, in consultation with the Attorney General, the Chief
Privacy Officer of the Department, the Chief
Privacy and Civil Liberties Officer of the Department of Justice, the Secretary of Commerce, the Director of National Intelligence, the
Secretary of Defense, the Director of the Office

1	of Management and Budget, the heads of sec-
2	tor-specific agencies and other appropriate
3	agencies, and the Privacy and Civil Liberties
4	Oversight Board, shall develop and periodically
5	review policies and procedures governing the re-
6	ceipt, retention, use, and disclosure of a cyber
7	threat indicator obtained by a Federal entity
8	under this section.
9	"(B) REQUIREMENTS.—The policies and
10	procedures developed under subparagraph (A)
11	shall—
12	"(i) reasonably limit the acquisition,
13	interception, retention, use, and disclosure
14	of a cyber threat indicator that is reason-
15	ably likely to identify specific persons, in-
16	cluding by establishing a process—
17	"(I) for the timely destruction of
18	information that is known not to be
19	directly related to a purpose or use
20	authorized under the section; and
21	"(II) to anonymize and safeguard
22	information received and disclosed
23	that may be used to identify specific
24	persons unrelated to a cyber threat;

1	"(ii) except as provided under clause
2	(iii), limit the reception, use, and retention
3	of a cyber threat indicator by a Federal
4	entity only to protect information systems
5	from cyber threats;
6	"(iii) for cyber threat indicators re-
7	ceived by the Center under subsection
8	(c)(1), establish publicly available guide-
9	lines that authorize law enforcement use of
10	a cyber threat indicator received by a Fed-
11	eral entity under subsection (c) only to in-
12	vestigate, prosecute, disrupt, or otherwise
13	respond to—
14	"(I) a computer crime;
15	"(II) a threat of death or serious
16	bodily harm;
17	"(III) a serious threat to a
18	minor, including sexual exploitation
19	and threats to physical safety; or
20	"(IV) an attempt or conspiracy
21	to commit an offense described in sub-
22	clause (I), (II), or (III);
23	"(iv) preserve the confidentiality of
24	disclosed proprietary information to the
25	greatest extent practicable, and require re-

1	cipients of such information to be informed
2	that the cyber threat indicator disclosed
3	may only be used for the purposes author-
4	ized under this section; and
5	"(v) provide for appropriate penalties
6	for any officer, employee, or agent of an
7	agency or department of the United States
8	who violates the provisions of this section
9	with respect to the receipt, retention, or
10	disclosure of a cyber threat indicator.
11	"(2) Oversight by federal entities.—The
12	head of each Federal entity that receives or discloses
13	a cyber threat indicator under this section shall es-
14	tablish a program to monitor and oversee compliance
15	with the policies and procedures developed under
16	paragraph (1)(A).
17	"(3) PUBLICATION.—The policies and proce-
18	dures developed under paragraph (1)(A) shall—
19	"(A) be provided to the appropriate con-
20	gressional committees; and
21	"(B) to the maximum extent practicable,
22	shall be posted on the Internet website of each
23	Federal entity that receives or discloses a cyber
24	threat indicator under this section.
25	"(4) Reports.—

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1	"(A) ANNUAL REPORT ON PRIVACY AND
2	CIVIL LIBERTIES.—The Chief Privacy Officer of
3	the Department and the Chief Privacy and Civil
4	Liberties Officer of the Department of Justice,
5	in consultation with the privacy and civil lib-
6	erties officers of other appropriate Federal
7	agencies, shall submit to Congress an annual
8	report assessing the privacy and civil liberties
9	impact of the governmental activities conducted
10	under this section.
11	"(B) Additional report.—
12	"(i) IN GENERAL.—Not later than 2
13	years after the date of enactment of this
14	section, and every year thereafter for 2
15	years, the Secretary, the Director of Na-
16	tional Intelligence, the Attorney General,
17	and the Secretary of Defense shall jointly
18	submit to Congress a report that—
19	"(I) describes the extent to which
20	the authorities provided under this
21	section have enabled the Federal Gov-
22	ernment and the private sector to
23	mitigate cyber threats;
24	"(II) discloses any significant
25	acts of noncompliance by a non-Fed-

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1	eral entity with this section, with spe-
2	cial emphasis on privacy and civil lib-
3	erties, and any measures taken by the
4	Federal Government to uncover such
5	noncompliance;
6	"(III) describes in general terms
7	the nature and quantity of informa-
8	tion disclosed and received by govern-
9	mental entities and private entities
10	under this section;
11	"(IV) describes the uses by Fed-
12	eral agencies of information received
13	under this section, including the gen-
14	eral quantity of information being
15	used for each purpose; and
16	"(V) identifies the emergence of
17	new threats or technologies that chal-
18	lenge the adequacy of this section, in-
19	cluding the definitions, authorities,
20	and requirements of this section, for
21	keeping pace with the threat.
22	"(ii) FORM OF REPORT.—Each report
23	submitted under clause (i) shall be sub-
24	mitted in unclassified form, but may in-
25	clude a classified annex.

1	"(f) Construction and Federal Preemption.—
2	"(1) CONSTRUCTION.—Nothing in this section
3	may be construed—
4	"(A) except as provided in subsection
5	(d)(2), to limit any law or regulation that re-
6	quires the disclosure, receipt, or retention of in-
7	formation;
8	"(B) to limit the authority of an entity to
9	share information concerning potential criminal
10	activity or investigations with law enforcement
11	entities;
12	"(C) to limit or prohibit otherwise lawful
13	disclosures of information by a private entity to
14	any governmental or private entity not con-
15	ducted under this section;
16	"(D) to allow the otherwise unauthorized
17	disclosure by a private entity of information or
18	material that has been determined by the Fed-
19	eral Government pursuant to an Executive
20	order, statute, or regulation to require protec-
21	tion against unauthorized disclosure for reasons
22	of national defense or foreign relations of the
23	United States, including—

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1	"(i) any restricted data, as defined in
2	section 11(y) of the Atomic Energy Act of
3	1954 (42 U.S.C. 2014(y));
4	"(ii) information related to intel-
5	ligence sources and methods; and
6	"(iii) information that is specifically
7	subject to a court order or a certification,
8	directive, or other authority precluding
9	such disclosure;
10	"(E) to authorize or limit liability for ac-
11	tions that would—
12	"(i) violate the Report and Order of
13	the Federal Communications Commission
14	with regard to Preserving the Open Inter-
15	net; Broadband Industry Practices (GN
16	Docket No. 09–191, WC Docket No. 07–
17	52) (adopted December 21, 2010) or any
18	successor Report or Order thereto; or
19	"(ii) modify or alter the obligations of
20	private entities under Report or Order de-
21	scribed in clause (i); or
22	"(F) to allow price-fixing, allocating a
23	market between competitors, monopolizing or
24	attempting to monopolize a market, boycotting
25	or exchanges of price or cost information, cus-

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1	tomer lists, or information regarding future
2	competitive planning.
3	"(2) Federal preemption.—This section su-
4	persedes any law or requirement of a State or polit-
5	ical subdivision of a State that restricts or otherwise
6	expressly regulates the retention, use, or disclosure
7	of a cyber threat indicator by a private entity.
8	"(3) Preservation of other state law.—
9	Except as expressly provided, nothing in this section
10	shall be construed to preempt the applicability of
11	any other State law or requirement.
12	"(4) No creation of a right to informa-
13	TION.—The provision of information to a non-Fed-
14	eral entity under this section does not create a right
15	or benefit to similar information by any other non-
16	Federal entity.
17	"(5) NO WAIVER OF PRIVILEGE.—No otherwise
18	privileged communication obtained in accordance
19	with, or in violation of, the provisions of this section
20	shall lose its privileged character.
21	"(6) PROHIBITION ON REQUIREMENT TO PRO-
22	VIDE INFORMATION TO THE FEDERAL GOVERN-
23	MENT.—Nothing in this section shall be construed to
24	authorize a Federal entity—

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"(A) to require a non-Federal entity to share information with the Federal Government; "(B) to condition the disclosure of a suber

"(B) to condition the disclosure of a cyber threat indicator under to this section to a non-Federal entity on the provision of cyber threat information to the Federal Government; or

8 "(C) to condition the award of any Federal 9 grant, contract or purchase on the provision of 10 a cyber threat indicator to a Federal entity, if 11 the provision of the cyber threat indicator does 12 not reasonably relate to the protection of the in-13 formation system of the Federal entity or infor-14 mation, goods, or services covered by the 15 award.".

(b) TECHNICAL AND CONFORMING AMENDMENT.—
The table of contents in section 1(b) of the Homeland Security Act of 2002 (6 U.S.C. 101 note) is amended by
inserting after the item relating to section 228 the following:

"Sec. 229. Cyber threat sharing.".

21 (c) SUNSET.—Effective on the date that is 5 years
22 after the date of enactment of this Act—

(1) section 229 of the Homeland Security Act
of 2002, as added by subsection (a), is repealed; and

(2) the table of contents in section 1(b) of the
 Homeland Security Act of 2002 (6 U.S.C. 101 note)
 is amended by striking the item relating to section
 229.

5 SEC. 3. SENSE OF CONGRESS.

6 It is the sense of Congress that the statement issued 7 by the Department of Justice and the Federal Trade Commission on April 10, 2014 entitled "Antitrust Policy 8 9 Statement On Sharing Of Cybersecurity Information" provides protections against antitrust concerns for the le-10 11 gitimate sharing of cyber threat indicators (as defined in section 229 of the Homeland Security Act of 2002 (as 12 13 added by section 2)).