106TH CONGRESS 1ST SESSION

H. R. 850

To amend title 18, United States Code, to affirm the rights of United States persons to use and sell encryption and to relax export controls on encryption.

IN THE HOUSE OF REPRESENTATIVES

February 25, 1999

Mr. Goodlatte (for himself, Ms. Lofgren, Mr. Armey, Mr. Dellay, Mr. Watts of Oklahoma, Mr. Davis of Virginia, Mr. Cox, Ms. Pryce of Ohio, Mr. Blunt, Mr. Gephardt, Mr. Bonior, Mr. Frost, Ms. DELAURO, Mr. LEWIS of Georgia, Mr. GEJDENSON, Mr. SENSEN-BRENNER, Mr. GEKAS, Mr. COBLE, Mr. SMITH of Texas, Mr. GALLEGLY, Mr. Bryant, Mr. Chabot, Mr. Barr of Georgia, Mr. Hutchinson, Mr. Pease, Mr. Cannon, Mr. Rogan, Mrs. Bono, Mr. Bachus, Mr. Con-YERS, Mr. Frank of Massachusetts, Mr. Boucher, Mr. Nadler, Ms. Jackson-Lee of Texas, Ms. Waters, Mr. Meehan, Mr. Delahunt, Mr. Wexler, Mr. Ackerman, Mr. Andrews, Mr. Archer, Mr. Ballenger, Mr. Barcia, Mr. Barrett of Nebraska, Mr. Barrett of Wisconsin, Mr. Barton of Texas, Mr. Bilbray, Mr. Blumenauer, Mr. Boehner, Mr. Brady of Texas, Mr. Brady of Pennsylvania, Ms. Brown of Florida, Mr. Brown of California, Mr. Burr of North Carolina, Mr. Burton of Indiana, Mr. Camp, Mr. Campbell, Mrs. Capps, Mr. Chambliss, Mrs. Chenoweth, Mrs. Christian-Christensen, Mrs. Clayton, Mr. Clement, Mr. Clyburn, Mr. Collins, Mr. Cook, Mr. Cooksey, Mrs. Cubin, Mr. Cummings, Mr. Cunningham, Mr. Davis of Illinois, Mr. Deal of Georgia, Mr. Defazio, Mr. Deutsch, Mr. Dickey, Mr. Dooley of California, Mr. Doolittle, Mr. Doyle, Mr. Dreier, Mr. Duncan, Ms. Dunn, Mr. Ehlers, Mrs. Emerson, Mr. English, Ms. Eshoo, Mr. Ewing, Mr. Farr of California, Mr. Fil-NER, Mr. FORD, Mr. FOSSELLA, Mr. FRANKS of New Jersey, Mr. GILLMOR, Mr. GOODE, Mr. GOODLING, Mr. GORDON, Mr. GREEN of Texas, Mr. Gutknecht, Mr. Hall of Texas, Mr. Hastings of Washington, Mr. Herger, Mr. Hill of Montana, Mr. Hobson, Mr. Hoekstra, Mr. Holden, Ms. Hooley of Oregon, Mr. Horn, Mr. Houghton, Mr. INSLEE, Mr. ISTOOK, Mr. JACKSON of Illinois, Mr. JEFFERSON, Ms. EDDIE BERNICE JOHNSON of Texas, Mrs. Johnson of Connecticut, Mr. KANJORSKI, Mr. KASICH, Mrs. KELLY, Ms. KIKPATRICK, Mr. KIND, Mr. KINGSTON, Mr. KNOLLENBERG, Mr. KOLBE, Mr. LAMPSON, Mr. LARGENT, Mr. LATHAM, Ms. LEE, Mr. LEWIS of Kentucky, Mr. LINDER,

Mr. Lucas of Oklahoma, Mr. Luther, Ms. McCarthy of Missouri, Mr. McDermott, Mr. McGovern, Mr. McIntosh, Mr. Maloney of Connecticut, Mr. Manzullo, Mr. Markey, Mr. Martinez, Mr. Matsui, Mrs. Meek of Florida, Mr. Metcalf, Mr. Mica, Ms. Millender-McDonald, Mr. George Miller of California, Mr. Moakley, Mr. MORAN of Virginia, Mrs. MORELLA, Mrs. MYRICK, Mrs. NAPOLITANO, Mr. Neal of Massachusetts, Mr. Nethercutt, Mr. Norwood, Mr. NUSSLE, Mr. OLVER, Mr. PACKARD, Mr. PALLONE, Mr. PASTOR, Mr. Peterson of Minnesota, Mr. Pickering, Mr. Pombo, Mr. Pomeroy, Mr. Price of North Carolina, Mr. Quinn, Mr. Radanovich, Mr. Ra-HALL, Mr. RANGEL, Mr. REYNOLDS, Ms. RIVERS, Mr. ROHRABACHER, Ms. Ros-Lehtinen, Mr. Rush, Mr. Salmon, Ms. Sanchez, Mr. Sand-ERS, Mr. SANFORD, Mr. SCARBOROUGH, Mr. SCHAFFER, Mr. SESSIONS, Mr. Shays, Mr. Sherman, Mr. Shimkus, Mr. Smith of Washington, Mr. Smith of New Jersey, Mr. Souder, Ms. Stabenow, Mr. Stark, Mr. Sununu, Mr. Tanner, Mrs. Tauscher, Mr. Tauzin, Mr. Taylor of North Carolina, Mr. Thomas, Mr. Thompson of Mississippi, Mr. THUNE, Mr. TIAHRT, Mr. TIERNEY, Mr. UPTON, Mr. VENTO, Mr. WALSH, Mr. WAMP, Mr. WATKINS, Mr. WELLER, Mr. WHITFIELD, Mr. WICKER, Ms. WOOLSEY, and Mr. WU) introduced the following bill; which was referred to the Committee on the Judiciary, and in addition to the Committee on International Relations, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To amend title 18, United States Code, to affirm the rights of United States persons to use and sell encryption and to relax export controls on encryption.

- 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 "Security And Freedom
- 5 through Encryption (SAFE) Act".

1 SEC. 2. SALE AND USE OF ENCRYPTION.

- 2 (a) IN GENERAL.—Part I of title 18, United States
- 3 Code, is amended by inserting after chapter 123 the fol-
- 4 lowing new chapter:

5 "CHAPTER 125—ENCRYPTED WIRE AND

6 **ELECTRONIC INFORMATION**

"2801. Definitions.

7 " \S 2801. Definitions

- 8 "As used in this chapter—
- 9 "(1) the terms 'person', 'State', 'wire commu-
- nication', 'electronic communication', 'investigative
- or law enforcement officer', and 'judge of competent
- jurisdiction' have the meanings given those terms in
- section 2510 of this title;
- 14 "(2) the term 'decrypt' means to retransform or
- unscramble encrypted data, including communica-
- tions, to its readable form;
- 17 "(3) the terms 'encrypt', 'encrypted', and
- 18 'encryption' mean the scrambling of wire commu-
- 19 nications, electronic communications, or electroni-
- 20 cally stored information, using mathematical for-
- 21 mulas or algorithms in order to preserve the con-
- fidentiality, integrity, or authenticity of, and prevent

[&]quot;2802. Freedom to use encryption.

[&]quot;2803. Freedom to sell encryption.

[&]quot;2804. Prohibition on mandatory key escrow.

[&]quot;2805. Unlawful use of encryption in furtherance of a criminal act.

1	unauthorized recipients from accessing or altering,
2	such communications or information;
3	"(4) the term 'key' means the variable informa-
4	tion used in a mathematical formula, code, or algo-
5	rithm, or any component thereof, used to decrypt
6	wire communications, electronic communications, or
7	electronically stored information, that has been
8	encrypted; and
9	"(5) the term 'key recovery information' means
10	information that would enable obtaining the key of
11	a user of encryption;
12	"(6) the term 'plaintext access capability"
13	means any method or mechanism which would pro-
14	vide information in readable form prior to its being
15	encrypted or after it has been decrypted;
16	"(7) the term 'United States person' means—
17	"(A) any United States citizen;
18	"(B) any other person organized under the
19	laws of any State, the District of Columbia, or
20	any commonwealth, territory, or possession of
21	the United States; and
22	"(C) any person organized under the laws
23	of any foreign country who is owned or con-
24	trolled by individuals or persons described in
25	subparagraphs (A) and (B).

1 "§ 2802. Freedom to use encryption

- 2 "Subject to section 2805, it shall be lawful for any
- 3 person within any State, and for any United States person
- 4 in a foreign country, to use any encryption, regardless of
- 5 the encryption algorithm selected, encryption key length
- 6 chosen, or implementation technique or medium used.

7 "§ 2803. Freedom to sell encryption

- 8 "Subject to section 2805, it shall be lawful for any
- 9 person within any State to sell in interstate commerce any
- 10 encryption, regardless of the encryption algorithm se-
- 11 lected, encryption key length chosen, or implementation
- 12 technique or medium used.

13 "§ 2804. Prohibition on mandatory key escrow

- 14 "(a) General Prohibition.—Neither the Federal
- 15 Government nor a State may require that, or condition
- 16 any approval on a requirement that, a key, access to a
- 17 key, key recovery information, or any other plaintext ac-
- 18 cess capability be—
- 19 "(1) built into computer hardware or software
- 20 for any purpose;
- 21 "(2) given to any other person, including a
- Federal Government agency or an entity in the pri-
- vate sector that may be certified or approved by the
- Federal Government or a State to receive it; or
- 25 "(3) retained by the owner or user of an
- encryption key or any other person, other than for

- 1 encryption products for use by the Federal Govern-
- 2 ment or a State.
- 3 "(b) Prohibition on Linkage of Different
- 4 Uses of Encryption.—Neither the Federal Government
- 5 nor a State may—
- 6 "(1) require the use of encryption products,
- 7 standards, or services used for confidentiality pur-
- 8 poses, as a condition of the use of such products,
- 9 standards, or services for authenticity or integrity
- 10 purposes; or
- 11 "(2) require the use of encryption products,
- standards, or services used for authenticity or integ-
- rity purposes, as a condition of the use of such prod-
- 14 ucts, standards, or services for confidentiality pur-
- poses.
- 16 "(c) Exception for Access for Law Enforce-
- 17 MENT PURPOSES.—Subsection (a) shall not affect the au-
- 18 thority of any investigative or law enforcement officer, or
- 19 any member of the intelligence community as defined in
- 20 section 3 of the National Security Act of 1947 (50 U.S.C.
- 21 401a), acting under any law in effect on the effective date
- 22 of this chapter, to gain access to encrypted communica-
- 23 tions or information.

1	§ 2005. Unlawful use of encryption in furtherance of
2	a criminal act
3	"(a) Encryption of Incriminating Communica-
4	TIONS OR INFORMATION UNLAWFUL.—Any person who
5	in the commission of a felony under a criminal statute of
6	the United States, knowingly and willfully encrypts in-
7	criminating communications or information relating to
8	that felony with the intent to conceal such communications
9	or information for the purpose of avoiding detection by
10	law enforcement agencies or prosecution—
11	"(1) in the case of a first offense under this
12	section, shall be imprisoned for not more than 5
13	years, or fined in the amount set forth in this title
14	or both; and
15	"(2) in the case of a second or subsequent of-
16	fense under this section, shall be imprisoned for not
17	more than 10 years, or fined in the amount set forth
18	in this title, or both.
19	"(b) Use of Encryption Not a Basis for Prob-
20	ABLE CAUSE.—The use of encryption by any person shall
21	not be the sole basis for establishing probable cause with
22	respect to a criminal offense or a search warrant.".
23	(b) Conforming Amendment.—The table of chap-
24	ters for part L of title 18 United States Code is amended

- 8 1 by inserting after the item relating to chapter 123 the fol-2 lowing new item: 3 SEC. 3. EXPORTS OF ENCRYPTION. 4 (a) Amendment to Export Administration Act 5 of 1979.—Section 17 of the Export Administration Act of 1979 (50 U.S.C. App. 2416) is amended by adding at the end thereof the following new subsection: 8 "(g) Certain Consumer Products, Computers, AND RELATED EQUIPMENT.— 10 "(1) General Rule.—Subject to paragraphs 11 (2) and (3), the Secretary shall have exclusive au-12 thority to control exports of all computer hardware, 13 software, computing devices, customer premises 14 equipment, communications network equipment, and 15 information technology for security (including 16 encryption), except that which is specifically de-17 signed or modified for military use, including com-
 - "(2) ITEMS NOT REQUIRING LICENSES.—After a one-time, 15-day technical review by the Secretary, no export license may be required, except pursuant to the Trading with the enemy Act or the International Emergency Economic Powers Act (but only to the extent that the authority of such Act is not

mand, control, and intelligence applications.

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1	exercised to extend controls imposed under this Act).
2	for the export or reexport of—
3	"(A) any computer hardware or software
4	or computing device, including computer hard-
5	ware or software or computing devices with
6	encryption capabilities—
7	"(i) that is generally available;
8	"(ii) that is in the public domain for
9	which copyright or other protection is not
10	available under title 17, United States
11	Code, or that is available to the public be-
12	cause it is generally accessible to the inter-
13	ested public in any form; or
14	"(iii) that is used in a commercial
15	off-the-shelf, consumer product or any
16	component or subassembly designed for
17	use in such a consumer product available
18	within the United States or abroad
19	which—
20	"(I) includes encryption capabili-
21	ties which are inaccessible to the end
22	user; and
23	"(II) is not designed for military
24	or intelligence end use:

1	"(B) any computing device solely because
2	it incorporates or employs in any form—
3	"(i) computer hardware or software
4	(including computer hardware or software
5	with encryption capabilities) that is ex-
6	empted from any requirement for a license
7	under subparagraph (A); or
8	"(ii) computer hardware or software
9	that is no more technically complex in its
10	encryption capabilities than computer
11	hardware or software that is exempted
12	from any requirement for a license under
13	subparagraph (A) but is not designed for
14	installation by the purchaser;
15	"(C) any computer hardware or software
16	or computing device solely on the basis that it
17	incorporates or employs in any form interface
18	mechanisms for interaction with other computer
19	hardware or software or computing devices, in-
20	cluding computer hardware and software and
21	computing devices with encryption capabilities;
22	"(D) any computing or telecommunication
23	device which incorporates or employs in any
24	form computer hardware or software encryption
25	capabilities which—

1	"(i) are not directly available to the
2	end user; or
3	"(ii) limit the encryption to be point-
4	to-point from the user to a central commu-
5	nications point or link and does not enable
6	end-to-end user encryption;
7	"(E) technical assistance and technical
8	data used for the installation or maintenance of
9	computer hardware or software or computing
10	devices with encryption capabilities covered
11	under this subsection; or
12	"(F) any encryption hardware or software
13	or computing device not used for confidentiality
14	purposes, such as authentication, integrity, elec-
15	tronic signatures, nonrepudiation, or copy pro-
16	tection.
17	"(3) Computer hardware or software or
18	COMPUTING DEVICES WITH ENCRYPTION CAPABILI-
19	TIES.—After a one-time, 15-day technical review by
20	the Secretary, the Secretary shall authorize the ex-
21	port or reexport of computer hardware or software
22	or computing devices with encryption capabilities for
23	nonmilitary end uses in any country—
24	"(A) to which exports of computer hard-
25	ware or software or computing devices of com-

1	parable strength are permitted for use by finan-
2	cial institutions not controlled in fact by United
3	States persons, unless there is substantial evi-
4	dence that such computer hardware or software
5	or computing devices will be—
6	"(i) diverted to a military end use or
7	an end use supporting international terror-
8	ism;
9	"(ii) modified for military or terrorist
10	end use; or
11	"(iii) reexported without any author-
12	ization by the United States that may be
13	required under this Act; or
14	"(B) if the Secretary determines that a
15	computer hardware or software or computing
16	device offering comparable security is commer-
17	cially available outside the United States from
18	a foreign supplier, without effective restrictions.
19	"(4) Definitions.—As used in this
20	subsection—
21	"(A)(i) the term 'encryption' means the
22	scrambling of wire communications, electronic
23	communications, or electronically stored infor-
24	mation, using mathematical formulas or algo-
25	rithms in order to preserve the confidentiality,

1	integrity, or authenticity of, and prevent unau-
2	thorized recipients from accessing or altering,
3	such communications or information;
4	"(ii) the terms 'wire communication' and
5	'electronic communication' have the meanings
6	given those terms in section 2510 of title 18,
7	United States Code;
8	"(B) the term 'generally available' means,
9	in the case of computer hardware or computer
10	software (including computer hardware or com-
11	puter software with encryption capabilities)—
12	"(i) computer hardware or computer
13	software that is—
14	"(I) distributed through the
15	Internet;
16	"(II) offered for sale, license, or
17	transfer to any person without restric-
18	tion, whether or not for consideration,
19	including, but not limited to, over-the-
20	counter retail sales, mail order trans-
21	actions, phone order transactions,
22	electronic distribution, or sale on ap-
23	proval;
24	"(III) preloaded on computer
25	hardware or computing devices that

1	are widely available for sale to the
2	public; or
3	"(IV) assembled from computer
4	hardware or computer software com-
5	ponents that are widely available for
6	sale to the public;
7	"(ii) not designed, developed, or tai-
8	lored by the manufacturer for specific pur-
9	chasers or users, except that any such pur-
10	chaser or user may—
11	"(I) supply certain installation
12	parameters needed by the computer
13	hardware or software to function
14	properly with the computer system of
15	the user or purchaser; or
16	"(II) select from among options
17	contained in the computer hardware
18	or computer software; and
19	"(iii) with respect to which the manu-
20	facturer of that computer hardware or
21	computer software—
22	"(I) intended for the user or pur-
23	chaser, including any licensee or
24	transferee, to install the computer
25	hardware or software and has sup-

1	plied the necessary instructions to do
2	so, except that the manufacturer of
3	the computer hardware or software, or
4	any agent of such manufacturer, may
5	also provide telephone or electronic
6	mail help line services for installation
7	electronic transmission, or basic oper-
8	ations; and
9	"(II) the computer hardware or
10	software is designed for such installa-
11	tion by the user or purchaser without
12	further substantial support by the
13	manufacturer;
14	"(C) the term 'computing device' means a
15	device which incorporates one or more micro-
16	processor-based central processing units that
17	can accept, store, process, or provide output of
18	data;
19	"(D) the term 'computer hardware' in-
20	cludes, but is not limited to, computer systems
21	equipment, application-specific assemblies
22	smart cards, modules, integrated circuits, and
23	printed circuit board assemblies;
24	"(E) the term 'customer premises equip-
25	ment' means equipment employed on the prem-

- 1 ises of a person to originate, route, or terminate 2 communications; "(F) the term 'technical assistance' in-3 cludes instruction, skills training, working knowledge, consulting services, and the transfer 6 of technical data; "(G) the term 'technical data' includes 7 blueprints, plans, diagrams, models, formulas, 8 9 tables, engineering designs and specifications, 10 and manuals and instructions written or re-11 corded on other media or devices such as disks, 12 tapes, or read-only memories; and "(H) the term 'technical review' means a 13 14 review by the Secretary of computer hardware 15 software or computing devices with or
- or software or computing devices with encryption capabilities, based on information about the product's encryption capabilities supplied by the manufacturer, that the computer hardware or software or computing device works as represented.".
- 21 (b) No Reinstatement of Export Controls on 22 Previously Decontrolled Products.—Any 23 encryption product not requiring an export license as of 24 the date of enactment of this Act, as a result of adminis-

1	trative decision or rulemaking, shall not require an export
2	license on or after such date of enactment.
3	(c) Applicability of Certain Export Con-
4	TROLS.—
5	(1) In General.—Nothing in this Act shall
6	limit the authority of the President under the Inter-
7	national Emergency Economic Powers Act, the
8	Trading with the enemy Act, or the Export Adminis-
9	tration Act of 1979, to—
10	(A) prohibit the export of encryption prod-
11	ucts to countries that have been determined to
12	repeatedly provide support for acts of inter-
13	national terrorism; or
14	(B) impose an embargo on exports to, and
15	imports from, a specific country.
16	(2) Specific denials.—The Secretary may
17	prohibit the export of specific encryption products to
18	an individual or organization in a specific foreign
19	country identified by the Secretary, if the Secretary
20	determines that there is substantial evidence that
21	such encryption products will be used for military or
22	terrorist end-use.
23	(3) Definition.—As used in this subsection
24	and subsection (b), the term "encryption" has the

meaning given that term in section 17(g)(5)(A) of

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- 1 the Export Administration Act of 1979, as added by
- 2 subsection (a) of this section.
- 3 (d) Continuation of Export Administration
- 4 Act.—For purposes of carrying out the amendment made
- 5 by subsection (a), the Export Administration Act of 1979
- 6 shall be deemed to be in effect.

7 SEC. 4. EFFECT ON LAW ENFORCEMENT ACTIVITIES.

- 8 (a) Collection of Information by Attorney
- 9 General Shall compile, and
- 10 maintain in classified form, data on the instances in which
- 11 encryption (as defined in section 2801 of title 18, United
- 12 States Code) has interfered with, impeded, or obstructed
- 13 the ability of the Department of Justice to enforce the
- 14 criminal laws of the United States.
- 15 (b) Availability of Information to the Con-
- 16 GRESS.—The information compiled under subsection (a),
- 17 including an unclassified summary thereof, shall be made
- 18 available, upon request, to any Member of Congress.

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