

106TH CONGRESS
1ST SESSION

H. R. 1572

To require the adoption and utilization of digital signatures by Federal agencies and to encourage the use of digital signatures in private sector electronic transactions.

IN THE HOUSE OF REPRESENTATIVES

APRIL 27, 1999

Mr. GORDON (for himself, Mr. SENSENBRENNER, and Mr. BROWN of California) introduced the following bill; which was referred to the Committee on Science

A BILL

To require the adoption and utilization of digital signatures by Federal agencies and to encourage the use of digital signatures in private sector electronic transactions.

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 “Digital Signature Act
5 of 1999”.

6 **SEC. 2. RECOGNITION OF DIGITAL SIGNATURES.**

7 (a) REQUIREMENT.—To the extent that a Federal
8 agency recognizes a written signature as authenticating a
9 document, the agency shall recognize a digital signature

1 as authenticating an equivalent electronically formatted
2 document.

3 (b) EFFECTIVE DATE.—Subsection (a) shall take ef-
4 fect 1 year after the date of the enactment of this Act.

5 **SEC. 3. DIGITAL SIGNATURE INFRASTRUCTURE.**

6 (a) GUIDELINES AND STANDARDS.—Not later than
7 6 months after the date of the enactment of this Act, the
8 Director, in consultation with industry, shall develop dig-
9 ital signature infrastructure guidelines and standards for
10 use by Federal agencies to enable those agencies to effec-
11 tively utilize digital signatures in a manner that is—

12 (1) sufficiently secure to meet the needs of
13 those agencies and the general public; and

14 (2) interoperable, to the maximum extent pos-
15 sible.

16 (b) ELEMENTS.—The guidelines and standards devel-
17 oped under subsection (a) shall include—

18 (1) technical security requirements for digital
19 signature infrastructure products and services;

20 (2) validation criteria to enable Federal agen-
21 cies to select digital signature infrastructure prod-
22 ucts and services appropriate to their needs; and

23 (3) minimum interoperability specifications for
24 the Federal acquisition of digital signature infra-
25 structure products and services.

1 (c) COORDINATION WITH NATIONAL POLICY
2 PANEL.—The Director shall ensure that the development
3 of guidelines and standards under this section is carried
4 out in coordination with the efforts of the National Policy
5 Panel for Digital Signatures under section 7.

6 (d) REVISIONS.—The Director shall periodically re-
7 view the guidelines and standards developed under sub-
8 section (a) and revise them as appropriate.

9 **SEC. 4. VALIDATION OF PRODUCTS.**

10 Not later than 6 months after the date of the enact-
11 ment of this Act, and periodically thereafter as appro-
12 priate, the Director shall make available to Federal agen-
13 cies and to the public an evaluation of the conformance
14 with the guidelines and standards developed under section
15 3 of commercially available digital signature infrastructure
16 products, and other such products used by Federal agen-
17 cies.

18 **SEC. 5. ELECTRONIC CERTIFICATION AND MANAGEMENT**
19 **SYSTEMS.**

20 (a) CRITERIA.—Not later than 6 months after the
21 date of the enactment of this Act, the Director shall estab-
22 lish minimum technical criteria for the use by Federal
23 agencies of electronic certification and management
24 systems.

1 (b) EVALUATION.—The Director shall establish a
2 program for evaluating the conformance with the criteria
3 established under subsection (a) of electronic certification
4 and management systems, developed for use by Federal
5 agencies or available for such use.

6 (c) MAINTENANCE OF LIST.—The Director shall
7 maintain and make available to Federal agencies a list of
8 electronic certification and management systems the Di-
9 rector has evaluated as conforming to the criteria estab-
10 lished under subsection (a).

11 **SEC. 6. REPORTS.**

12 Not later than 6 months after the date of the enact-
13 ment of this Act, and annually thereafter, the Director
14 shall transmit to the Congress a report that includes—

15 (1) a description and analysis of the utilization
16 by Federal agencies of digital signatures;

17 (2) an evaluation of the extent to which Federal
18 agencies' digital signature infrastructures conform
19 to the guidelines and standards developed under sec-
20 tion 3(a);

21 (3) an evaluation of the extent to which Federal
22 agencies' electronic certification and management
23 systems conform to the criteria established under
24 section 5(a);

25 (4) the list described in section 5(c); and

1 (5) evaluations made under section 4.

2 **SEC. 7. NATIONAL POLICY PANEL FOR DIGITAL SIGNA-**
3 **TURES.**

4 (a) ESTABLISHMENT.—Not later than 90 days after
5 the date of the enactment of this Act, the Under Secretary
6 shall establish a National Policy Panel for Digital Signa-
7 tures. The Panel shall be composed of government, aca-
8 demic, and industry technical and legal experts on the im-
9 plementation of digital signature technologies, State offi-
10 cials, including officials from States which have enacted
11 laws establishing digital signature infrastructures, and
12 representative individuals from the interested public.

13 (b) RESPONSIBILITIES.—The Panel shall serve as a
14 forum for exploring all relevant factors associated with the
15 development of a national digital signature infrastructure
16 based on uniform standards to enable the widespread
17 availability and use of digital signature systems. The
18 Panel shall develop—

19 (1) model practices and procedures for certifi-
20 cation authorities to ensure the accuracy, reliability,
21 and security of operations associated with issuing
22 and managing digital certificates;

23 (2) standards to ensure consistency among ju-
24 risdictions that license certification authorities; and

25 (3) audit standards for certification authorities.

1 (c) COORDINATION.—The Panel shall coordinate its
2 efforts with those of the Director under section 3.

3 (d) ADMINISTRATIVE SUPPORT.—The Under Sec-
4 retary shall provide administrative support to enable the
5 Panel to carry out its responsibilities.

6 (e) REPORT.—Not later than 1 year after the date
7 of the enactment of this Act, the Under Secretary shall
8 transmit to the Congress a report containing the rec-
9 ommendations of the Panel.

10 **SEC. 8. DEFINITIONS.**

11 For purposes of this Act—

12 (1) the term “certification authorities” means
13 issuers of digital certificates;

14 (2) the term “digital certificate” means an elec-
15 tronic document that binds an individual’s identity
16 to the individual’s digital signature;

17 (3) the term “digital signature” means a math-
18 ematically generated mark utilizing asymmetric key
19 cryptography techniques that is unique to both the
20 signatory and the information signed;

21 (4) the term “digital signature infrastructure”
22 means the software, hardware, and personnel re-
23 sources, and the procedures, required to effectively
24 utilize digital certificates and digital signatures;

1 (5) the term “Director” means the Director of
2 the National Institute of Standards and Technology;

3 (6) the term “electronic certification and man-
4 agement systems” means computer systems, includ-
5 ing associated personnel and procedures, that enable
6 individuals to apply unique digital signatures to elec-
7 tronic information; and

8 (7) the term “Under Secretary” means the
9 Under Secretary of Commerce for Technology.

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