

ASSEMBLY BILL NO. 674—COMMITTEE ON COMMERCE AND LABOR

(ON BEHALF OF SECRETARY OF STATE)

MARCH 22, 1999

Referred to Committee on Commerce and Labor

SUMMARY—Provides for establishment of provisions regarding use of digital signatures.
(BDR 59-672)

FISCAL NOTE: Effect on Local Government: No.
Effect on the State or on Industrial Insurance: Yes.

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EXPLANATION – Matter in ***bolded italics*** is new; matter between brackets ~~for omitted material~~ is material to be omitted.

AN ACT relating to commercial transactions; providing for the establishment of provisions regarding the use of digital signatures; authorizing the secretary of state to adopt regulations regarding digital signatures; providing a penalty; and providing other matters properly relating thereto.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN SENATE
AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. NRS is hereby amended by adding thereto a new Title, designated Title 59 of NRS, and adding to that Title a new chapter to consist of the provisions set forth as sections 2 to 21, inclusive, of this act.

Sec. 2. *As used in this chapter, unless the context otherwise requires, the words and terms defined in sections 3 to 14, inclusive, of this act have the meanings ascribed to them in those sections.*

Sec. 3. *“Asymmetric cryptosystem” means an algorithm or series of algorithms that provide a secure key pair.*

Sec. 4. *“Certificate” means a computer-based record that:*

1. Identifies the certification authority using it;

2. Identifies a subscriber;

3. Sets forth the public key of the subscriber; and

4. Is digitally signed by the certification authority issuing it.

Sec. 5. *“Certification authority” means a person who issues a certificate.*

1 **Sec. 6.** *“Correspond” means, with reference to keys, belonging to*
2 *the same key pair.*

3 **Sec. 7.** *“Digital signature” means a transformation of a message*
4 *using an asymmetric cryptosystem.*

5 **Sec. 8.** *“Hold a private key” means to be authorized to use a private*
6 *key.*

7 **Sec. 9.** *“Key pair” means a private key and its corresponding public*
8 *key in an asymmetric cryptosystem, which may be used in such a manner*
9 *that the public key can verify a digital signature created by the private*
10 *key.*

11 **Sec. 10.** *“Message” means a digital representation of information.*

12 **Sec. 11.** *“Private key” means the key of a key pair used to create a*
13 *digital signature.*

14 **Sec. 12.** *“Public key” means the key of a key pair used to verify a*
15 *digital signature.*

16 **Sec. 13.** *“Subscriber” means a person who:*

- 17 1. *Is identified as such in a certificate;*
18 2. *Accepts the certificate; and*
19 3. *Holds the private key that corresponds to the public key set forth*
20 *in the certificate.*

21 **Sec. 14.** *“Verify a digital signature” means, in relation to a given*
22 *digital signature, message and public key, to determine accurately that:*

- 23 1. *The digital signature was created by the private key corresponding*
24 *to the public key; and*
25 2. *The message has not been altered since the digital signature was*
26 *created.*

27 **Sec. 15.** *The provisions of this chapter apply to any transaction for*
28 *which a digital signature may be used to satisfy a requirement that a*
29 *document or record be signed or in writing as set forth in section 16 of*
30 *this act, including, without limitation, transactions carried out by private*
31 *businesses and transactions carried out by governmental entities.*

32 **Sec. 16.** 1. *Except as otherwise provided in subsection 2, if each*
33 *person or governmental entity who will be involved in the submission and*
34 *acceptance of a record or other document agrees to the use of a digital*
35 *signature, where a statute or rule of law requires that the record or other*
36 *document be signed or in writing, the use of a message which:*

- 37 (a) *Represents the record or other document; and*
38 (b) *Is transformed by a digital signature,*
39 *shall be deemed to satisfy the statute or rule of law with respect to the*
40 *requirement that the record or other document be signed or in writing.*

41 2. *The provisions of this section do not apply with respect to:*

- 42 (a) *A sworn statement;*
43 (b) *An acknowledgment;*

1 (c) A record or other document that is required to be signed in the
2 presence of a third party; or

3 (d) A record or other document with respect to which the requirement
4 that the record or other document must be signed or in writing is
5 accompanied by an additional qualifying requirement.

6 **Sec. 17. 1.** Except as otherwise provided by specific statute, a
7 public agency may provide that any document submitted to the public
8 agency may be submitted electronically if the document is transformed by
9 a digital signature.

10 2. As used in this section, "public agency" means an agency, bureau,
11 board, commission, department or division of the State of Nevada or a
12 political subdivision thereof.

13 **Sec. 18. 1.** A person shall not conduct business as a certification
14 authority without first obtaining a license as a certification authority
15 from the secretary of state.

16 2. The secretary of state may charge a reasonable fee for such
17 licensure.

18 **Sec. 19.** The secretary of state may:

19 1. Issue injunctions and orders to enforce the provisions of this
20 chapter and any regulations adopted by the secretary of state pursuant
21 thereto.

22 2. Impose a civil penalty not to exceed \$10,000 for a willful violation
23 of a provision of this chapter or a regulation adopted by the secretary of
24 state pursuant thereto.

25 **Sec. 20. 1.** It is unlawful for a person to:

26 (a) Forge a digital signature; or

27 (b) Provide false information knowingly to the secretary of state with
28 respect to any provision of this chapter or a regulation adopted pursuant
29 thereto that requires such a person to provide information to the
30 secretary of state.

31 2. A person who violates the provisions of subsection 1 is guilty of a
32 gross misdemeanor.

33 3. As used in this section, "forge a digital signature" means to create
34 a digital signature that:

35 (a) Is not authorized by the person who holds the private key used to
36 create the digital signature; or

37 (b) Although verifiable by a public key, the certificate that contains
38 the public key identifies a subscriber who:

39 (1) Does not exist; or

40 (2) Does not hold the private key that corresponds to the public key
41 contained in the certificate.

1 **Sec. 21.** *The secretary of state shall adopt regulations regarding*
2 *digital signatures, including, without limitation, regulations pertaining*
3 *to:*

4 1. *The use of a digital signature, including, without limitation,*
5 *standards for the commercial use of a digital signature;*

6 2. *Licensure of a certification authority, including, without*
7 *limitation, professional standards that a certification authority must meet*
8 *in conducting its business;*

9 3. *The verification of a digital signature;*

10 4. *The liability that may be incurred by a subscriber, certification*
11 *authority or recipient of a message transformed by a digital signature,*
12 *including, without limitation, the limitation of such liability;*

13 5. *The use of a digital signature as an acknowledgment, as that term*
14 *is defined in NRS 240.002;*

15 6. *The issuance of injunctions and orders and the imposition of civil*
16 *penalties pursuant to section 19 of this act;*

17 7. *The status of a private key as personal property;*

18 8. *The responsibilities of a subscriber with respect to the use and*
19 *handling of a private key;*

20 9. *The confidentiality of information represented in a message that is*
21 *transformed by a digital signature; and*

22 10. *Any other aspect of the use or verification of digital signatures*
23 *that the secretary of state determines to be necessary.*

24 **Sec. 22.** NRS 239.041, 239.042, 239.043 and 239.044 are hereby
25 repealed.

26 **Sec. 23.** The amendatory provisions of this act do not apply to
27 offenses committed before the effective date of this act.

28 **Sec. 24.** This act becomes effective upon passage and approval.

TEXT OF REPEALED SECTIONS

239.041 “Public agency” defined. As used in NRS 239.041 to 239.044, inclusive, “public agency” means any agency, bureau, board, commission, department or division of the State of Nevada or any political subdivision thereof.

239.042 Electronic submission of records authorized; use of and conditions for acceptance of electronic symbol as signature.

1. Except as otherwise provided by specific statute, a public agency may:

(a) Provide that any document submitted to the public agency may be submitted electronically and may be signed with an electronic symbol; and

(b) If the recipient of a document so authorizes, use an electronic symbol as the signature of a public officer or employee of the agency on any document for which a signature is required.

2. An electronic symbol may be accepted pursuant to subsection 1 only if it is:

(a) Unique to the person for whom it is used as a signature;

(b) Capable of verification; and

(c) Linked to data in such a manner that the signature is invalidated if the data is altered.

239.043 Electronic symbols as substitute or supplement to signature: Regulations of secretary of state. The secretary of state shall provide by regulation for the use of electronic symbols to substitute or supplement the handwritten or facsimile signature of a person as provided in NRS 239.042. Such regulations must include, without limitation:

1. The manner in which a public agency may accept an electronic symbol as a substitute or supplement to a handwritten or facsimile signature; and

2. The manner in which an electronic symbol must be verified.

239.044 Licensing of business to verify electronic symbols used as substitute or supplement to signature: Fees; regulations.

1. The secretary of state may license a business to verify an electronic symbol that is used as a substitute or supplement to a handwritten or facsimile signature.

2. The secretary of state may charge a reasonable fee for such licensure.

3. The secretary of state may adopt regulations to carry out the provisions of this section.