

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 8-672)

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 in skeleton form 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:

- 1 **Section 1.** Title 8 of NRS is hereby amended by adding thereto a new
2 chapter to consist of the provisions set forth as sections 2 to 19, inclusive,
3 of this act.
- 4 **Sec. 2.** *As used in this chapter, unless the context otherwise requires,*
5 *the words and terms defined in sections 3 to 14, inclusive, of this act have*
6 *the meanings ascribed to them in those sections.*
- 7 **Sec. 3.** *“Asymmetric cryptosystem” means an algorithm or series of*
8 *algorithms that provide a secure key pair.*
- 9 **Sec. 4.** *“Certificate” means a computer-based record that:*
10 *1. Identifies the certification authority using it;*
11 *2. Identifies a subscriber;*
12 *3. Sets forth the public key of the subscriber; and*
13 *4. Is digitally signed by the certification authority issuing it.*
- 14 **Sec. 5.** *“Certification authority” means a person who issues a*
15 *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.** *If a statute or rule of law requires that a document or*
28 *record be signed or in writing, the use of a message which:*

- 29 1. *Represents the document or record; and*
30 2. *Is transformed by a verified digital signature,*
31 *shall be deemed to satisfy such statute or rule of law with respect to the*
32 *requirement that the document or record be signed or in writing.*

33 **Sec. 16.** 1. *A person shall not conduct business as a certification*
34 *authority without first obtaining a license as a certification authority*
35 *from the secretary of state.*

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

38 **Sec. 17.** *The secretary of state may:*

- 39 1. *Issue injunctions and orders to enforce the provisions of this*
40 *chapter and any regulations adopted by the secretary of state pursuant*
41 *thereto.*

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

4 **Sec. 18.** 1. It is unlawful for a person to:

5 (a) Forge a digital signature; or

6 (b) Provide false information knowingly to the secretary of state with
7 respect to any provision of this chapter or a regulation adopted pursuant
8 thereto that requires such a person to provide information to the
9 secretary of state.

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

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

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

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

18 (1) Does not exist; or

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

21 **Sec. 19.** The secretary of state shall adopt regulations regarding
22 digital signatures, including, without limitation, regulations pertaining
23 to:

24 1. The use of a digital signature, including, without limitation,
25 standards for the commercial use of a digital signature;

26 2. Licensure of a certification authority, including, without
27 limitation, professional standards that a certification authority must meet
28 in conducting its business;

29 3. The verification of a digital signature;

30 4. The liability that may be incurred by a subscriber, certification
31 authority or recipient of a message transformed by a digital signature,
32 including, without limitation, the limitation of such liability;

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

35 6. The issuance of injunctions and orders and the imposition of civil
36 penalties pursuant to section 17 of this act;

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

38 8. The responsibilities of a subscriber with respect to the use and
39 handling of a private key;

40 9. The confidentiality of information represented in a message that is
41 transformed by a digital signature; and

42 10. Any other aspect of the use or verification of digital signatures
43 that the secretary of state determines to be necessary.

- 1 **Sec. 20.** NRS 239.042 is hereby amended to read as follows:
2 239.042 1. Except as otherwise provided by specific statute, a public
3 agency may ~~be~~ **provide** that any document submitted to the public agency
4 ~~—(a) Provide~~ **provide** that any document submitted to the public agency
5 may be submitted electronically ~~and may be signed with an electronic~~
6 ~~symbol; and~~
7 ~~—(b) If the recipient of a document so authorizes, use an electronic~~
8 ~~symbol as the signature of a public officer or employee of the agency on~~
9 ~~any document for which a signature is required.~~
10 ~~—2. An electronic symbol may be accepted pursuant to subsection 1~~
11 ~~only if it is:~~
12 ~~—(a) Unique to the person for whom it is used as a signature;~~
13 ~~—(b) Capable of verification; and~~
14 ~~—(c) Linked to data in such a manner that the signature is invalidated if~~
15 ~~the data is altered.] if such a document is transformed by a digital~~
16 **signature.**
17 **2. As used in this section, “public agency” means an agency, bureau,**
18 **board, commission, department or division of the State of Nevada or a**
19 **political subdivision thereof.**
20 **Sec. 21.** NRS 239.041, 239.043 and 239.044 are hereby repealed.
21 **Sec. 22.** The amendatory provisions of this act do not apply to
22 offenses committed before the effective date of this act.
23 **Sec. 23.** 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.

239.043 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.

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