House Study Bill 650

Bill Text

PAG LIN 1 1 DIVISION I SUBCHAPTER 1 **GENERAL** Section 101. <u>NEW SECTION</u>. 554C.101 SHORT TITLE. This chapter shall be known and may be cited as the "Iowa 6 Electronic Commerce Security Act". Sec. 102. NEW SECTION. 554C.102 PURPOSES AND 1 8 CONSTRUCTION. This chapter shall be construed consistently with what is 1 10 commercially reasonable under the circumstances and to 1 11 effectuate all of the following purposes: 1. Facilitate electronic communications by means of 1 13 reliable electronic records. 2. Facilitate and promote electronic commerce, by 1 15 eliminating barriers resulting from uncertainties over writing 1 16 and signature requirements, and promoting the development of 1 17 the legal and business infrastructure necessary to implement 1 18 secure electronic commerce. 3. Facilitate electronic filing of documents with state 1 20 and local government agencies and promote efficient delivery 1 21 of government services by means of reliable electronic 1 22 records. 4. Minimize the incidence of forged electronic records, 1 24 intentional and unintentional alteration of records, and fraud 1 25 in electronic commerce. 5. Establish uniformity of rules, regulations, and 1 27 standards regarding the authentication and integrity of 1 28 electronic records. 6. Promote public confidence in the integrity, 1 30 reliability, and legality of electronic records and electronic 1 31 commerce. 1 32 Sec. 103. <u>NEW SECTION</u>. 554C.103 VARIATION BY AGREEMENT 1 33 USE OF ELECTRONIC MEANS OPTIONAL. As between parties involved in generating, sending, 1 35 receiving, storing, or otherwise processing electronic 1 records, the provisions of this chapter may be varied by 2 agreement of the parties. However, an agreement shall not 3 vary requirements provided in section 554C.203, subsection 2; 4 section 554C.204, subsection 4; section 554C.305, subsection 5 2; sections 554C.422, 554C.423, 554C.424, and 554C.442; and 6 section 554C.444, subsection 2. 2. This chapter shall not be construed to require a person 2 8 to create, store, transmit, accept, or otherwise use or 2 9 communicate information, records, or signatures by electronic 2 10 means or in electronic form. 2 11 SUBCHAPTER 2 2 12 ELECTRONIC RECORDS AND SIGNATURES GENERALLY 2 13 Sec. 104. <u>NEW SECTION</u>. 554C.201 DEFINITIONS. 2 14 As used in this chapter, unless the context otherwise 2 15 requires: 1. "Commissioner" means the commissioner of insurance 2 17 appointed pursuant to section 505.2. 2. "Consumer transaction" means a transaction by an

2 19 individual for personal, household, or family use.

2 20 3. "Electronic" includes electrical, digital, magnetic, 2 21 optical, electromagnetic, or any other form of technology that

- 2 22 entails capabilities similar to these technologies.
- 2 23 4. "Electronic record" means a record generated,
- 2 24 communicated, received, or stored by electronic means for use
- 2 25 in an information system or for transmission from one 2 26 information system to another.
- 2 27 5. "Electronic signature" means a signature in electronic 2 28 form attached to or logically associated with an electronic 2 29 record.
- 2 30 6. "Government agency" means any executive, legislative, 2 31 or judicial agency, department, board, commission, authority, 2 32 institution, or instrumentality of this state or of any
- 2 33 county, city, or other political subdivision of this state.
 2 34 7. "Information" includes but is not limited to data,
- 2 35 text, images, sound, codes, computer programs, software, and 3 1 databases.
- 3 2 8. "Party" means a person involved in an electronic 3 3 transaction governed by the provisions of this chapter.
- 3 4 9. "Record" means information that is inscribed, stored,
 3 5 or otherwise fixed on a tangible medium or that is stored in
 3 6 an electronic or other medium and is retrievable in
 3 7 perceivable form.
- 3 8 10. "Rule of law" means any statute, rule of or order by a 3 9 government agency, regulation, ordinance, common law rule, or 3 10 court decision enacted, adopted, established, or rendered by 3 11 the general assembly, government agency, court, political 3 12 subdivision of, or other authority of, this state.
- 3 13 11. "Security procedure" means a methodology or procedure 3 14 for the purpose of doing any of the following:
- 3 15 a. Verifying that an electronic record is the record of a 3 16 specific person.
- b. Detecting an error or alteration in the communication,
 18 content, or storage of an electronic record since a specific
 19 point in time. A security procedure may require the use of
 20 algorithms or codes, identifying words or numbers, encryption,
 21 answer back, acknowledgment procedures, or similar security
 22 devices.
- 3 23 12. "Signed" or "signature" includes any symbol executed 3 24 or adopted, or any security procedure employed or adopted, 3 25 including by use of electronic means, by or on behalf of a 3 26 person with a present intention to authenticate a record.
- 3 27 Definitions used in any part of this chapter shall apply in 3 28 all other parts of this chapter.
- 3 29 Sec. 105. <u>NEW SECTION</u>. 554C.202 LEGAL RECOGNITION.
- 3 30 Information shall not be denied legal effect, validity, or 3 31 enforceability solely on the grounds that it is in the form of 3 32 an electronic record or an electronic signature.
- 3 33 Sec. 106. <u>NEW SECTION</u>. 554C.203 ELECTRONIC RECORDS.
- 3 34 1. Where a rule of law requires information to be written 3 35 or in writing or provides for certain consequences if it is 4 1 not, an electronic record satisfies that rule of law 4 2 requirement.
- $4\ 3\ 2$. The provisions of this section shall not apply to any $4\ 4$ of the following:
- 4 5 a. When its application involves a construction of a rule 4 6 of law that is clearly inconsistent with the manifest intent 4 7 of the body imposing the requirement or repugnant to the
- 4 8 context of the same rule of law. However, the mere
- 4 9 requirement that information be in writing, written, or
- 4 10 printed shall not by itself be sufficient to establish an
- $4\ 11$ intent which is inconsistent with the requirement of this $4\ 12$ section.
- 4 13 b. To any rule of law governing the creation or execution 4 14 of a will or trust, living will, a general, durable, or
- 4 15 healthcare power of attorney, or a voluntary, involuntary, or
- 4 16 standby guardianship or conservatorship.
- 4 17 c. To any record that serves as a unique and transferable 4 18 physical expression of rights and obligations including,

4 19 without limitation, negotiable instruments and other 4 20 instruments of title wherein possession of the instrument is

4 21 deemed to confer title in a consumer transaction.

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- d. To any record that grants a legal or equitable interest 4 23 in real property, including a mortgage, deed of trust, pledge, 4 24 security interest, or other lien or encumbrance in a consumer 4 25 transaction.
- Sec. 107. <u>NEW SECTION</u>. 554C.204 ELECTRONIC SIGNATURES.
- 1. Where a rule of law requires a signature, or provides 4 28 for certain consequences if a document is not signed, an 4 29 electronic signature satisfies that requirement.
- 2. An electronic signature may be proved in any manner, 4 31 including by showing that a procedure exists by which a person 4 32 must of necessity have executed a symbol or security procedure 4 33 for the purpose of verifying that an electronic record is the 4 34 record of that person in order to proceed further with a 4 35 transaction.
- 1 3. Absent an agreement to the contrary, the recipient of a 2 signed electronic record is entitled to establish reasonable 3 requirements to ensure that the symbol or security procedure 4 adopted as an electronic signature by the person signing is 5 5 authentic.
- 4. The provisions of this section shall not apply to any 5 7 of the following:
- a. When its application would involve a construction of a 5 9 rule of law that is clearly inconsistent with the manifest 5 10 intent of the body imposing the requirement or repugnant to 5 11 the context of the same rule of law. However, the mere 5 12 requirement that information be in writing, written, or 5 13 printed shall not by itself be sufficient to establish an 5 14 intent which is inconsistent with the requirement of this 5 15 section.
- 5 16 b. To any rule of law governing the creation or execution 5 17 of a will or trust, living will, a general, durable, or 5 18 healthcare power of attorney, or a voluntary, involuntary, or 5 19 standby guardianship or conservatorship.
- 5 20 c. To any record that serves as a unique and transferable 5 21 physical expression of rights and obligations including, but 5 22 is not limited, to negotiable instruments and other 5 23 instruments of title wherein possession of the instrument is 5 24 deemed to confer title in a consumer transaction.
- d. To any record that grants a legal or equitable interest 5 26 in real property, including a mortgage, deed of trust, pledge, 5 27 security interest, or other lien or encumbrance in a consumer 5 28 transaction.
- 5 29 Sec. 108. NEW SECTION. 554C.205 REQUIREMENT FOR ORIGINAL 5 30 INFORMATION.
- 5 31 1. Where a rule of law requires information to be 5 32 presented or retained in its original form, or provides 5 33 consequences for information not being presented or retained 5 34 in its original form, that rule of law is satisfied by an 5 35 electronic record if there exists reliable assurance as to the 1 integrity of the information from the time when it was first 2 generated in its final form, as an electronic record or 3 otherwise.
- 2. The criteria for assessing the integrity of information 5 shall be whether the information has remained complete and 6 unaltered, apart from the addition of any endorsement and any 7 change that arises in the normal course of communication, 8 storage, and display. The standard of reliability required 6 9 shall be assessed in the light of all relevant circumstances, 6 10 including but not limited to the purpose for which the 6 11 information was generated.
- 3. The provisions of this section do not apply to any 6 12 6 13 record that serves as a unique and transferable physical 6 14 expression of rights and obligations including, but not 6 15 limited to, negotiable instruments and other instruments of

6 16 title wherein possession of the instrument is deemed to confer 6 17 title.

6 18 Sec. 109. <u>NEW SECTION</u>. 554C.206 ADMISSIBILITY INTO 6 19 EVIDENCE.

- 6 20 1. In any legal proceeding, nothing in the application of 6 21 the rules of evidence shall apply so as to deny the 6 22 admissibility of an electronic record or electronic signature 6 23 into evidence based on any of the following:
- a. On the sole ground that it is an electronic record or 6 25 electronic signature.
- 6 26 b. On the grounds that it is not in its original form or 6 27 is not an original.
- 2. Information in the form of an electronic record shall 6 29 be given due evidential weight by the trier of fact. In 6 30 assessing the evidential weight of an electronic record or 6 31 electronic signature where its authenticity is in issue, the 6 32 trier of fact may consider all relevant information or 6 33 circumstances, including but not limited to the manner in 6 34 which it was generated, stored, or communicated, the 6 35 reliability of the manner in which its integrity was 1 maintained, the manner in which its originator was identified, 7 2 and the manner in which the electronic record was signed. 7

Sec. 110. NEW SECTION. 554C.207 RETENTION OF ELECTRONIC 4 RECORDS.

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- 7 5 1. a. Where a rule of law requires that certain 6 documents, records, or information be retained, that 7 requirement is met by retaining electronic records of the 8 information, provided that all of the following conditions are 9 satisfied:
- 7 10 (1) The electronic record and the information contained in 7 11 the electronic record must be accessible so as to be usable 7 12 for subsequent reference at all times when such information 7 13 must be retained.
- (2) The information must be retained in the format in 7 15 which it was originally generated, sent, or received; or in a 7 16 format that can be demonstrated to represent accurately the 7 17 information originally generated, sent, or received.
- (3) Data is retained which enables the identification of 7 19 the origin and destination of the information, the 7 20 authenticity and integrity of the information, and the date 7 21 and time when it was generated, sent, or received.
- b. An obligation to retain documents, records, or 7 23 information in accordance with this subsection does not extend 7 24 to any data the sole purpose of which is to enable the record 7 25 to be sent or received.
- 2. Nothing in this section shall preclude any federal or 7 27 government agency from specifying additional requirements for 7 28 the retention of records that are subject to the jurisdiction 7 29 of such agency. 7 30

SUBCHAPTER 3

SECURE ELECTRONIC RECORDS AND SIGNATURES Sec. 111. <u>NEW SECTION</u>. 554C.301 SECURE ELECTRONIC 7 33 RECORD.

- 1. Subject to the provisions of section 554C.303, if, by 7 35 the application of a qualified security procedure, it can be 1 verified that an electronic record has not been altered since 2 a specified point in time, such electronic record shall be 3 considered to be a secure electronic record from such 4 specified point in time to the time of verification.
 - 2. For purposes of this subchapter, a qualified security 6 procedure is a security procedure to detect changes in content 7 that is any of the following:
- a. Authorized by, and implemented in accordance with the 8 9 requirements of, this chapter.
- 8 10 b. Previously agreed to by the parties, and implemented in 8 11 accordance with the terms of such agreement.
- c. Certified by the commissioner as providing reliable

- 8 17 1. Subject to the provisions of section 554C.303, if, by 8 18 the application of a qualified security procedure, it can be 8 19 authenticated that an electronic signature is the signature of 8 20 a specific person, the electronic signature shall be 8 21 considered to be a secure electronic signature at the time of 8 22 verification.
- 8 23 2. A qualified security procedure for purposes of this 8 24 section is a security procedure for identifying a party that 8 25 is any of the following:
- 8 26 a. Authorized by, and implemented in accordance with the 8 27 requirements of, this chapter.
- 8 28 b. Previously agreed to by the parties to an agreement, 8 29 and implemented in accordance with the terms of the agreement.
- 8 30 c. Certified by the commissioner as being capable of 8 31 creating an electronic signature that meets all of the 8 32 following conditions:
- 8 33 (1) Is unique to the signer within the context in which it 8 34 is used.
- 8 35 (2) Can be used to promptly, objectively, and 9 1 automatically identify the person signing the electronic 9 2 record.
 - (3) Was reliably created by such identified person.
- 9 4 (4) Is linked to the electronic record to which it relates 9 5 in a manner which ensures that if the record or signature is 9 6 changed the electronic signature is invalidated, provided that 9 7 the security procedure is implemented in a manner required by 9 8 the certification.
- 9 9 Sec. 113. NEW SECTION. 554C.303 COMMERCIALLY REASONABLE 9 10 RELIANCE.
- 9 11 1. An electronic record or electronic signature that 9 12 qualifies for secure status pursuant to section 554C.301, 9 13 554C.302, 554C.412, or 554C.413 shall not be considered secure 9 14 unless the proponent establishes all of the following:
- 9 15 a. Use of the applicable security procedure was 9 16 commercially reasonable.
- 9 17 b. The security procedure was implemented in a trustworthy 9 18 manner or, where applicable, in a manner specified by this 9 19 chapter or the commissioner, to the extent such information is 9 20 within the knowledge of the proponent.
- 9 21 c. Reliance on the security procedure was reasonable and 9 22 in good faith in light of all the circumstances known to the 9 23 proponent at the time of the reliance, having due regard for 9 24 all of the following:
- 9 25 (1) Information that the proponent knew or had notice of 9 26 at the time of reliance, including all facts, statements, and 9 27 limitations contained in any statement by any third party 9 28 involved in the authentication process.
- 9 29 (2) The value or importance of the electronic record 9 30 signed with the secure electronic signature, if known.
- 9 31 (3) Any course of dealing between the proponent and the 9 32 purported sender and the available indicia of reliability or 9 33 unreliability apart from the secure electronic signature.
- 9 34 (4) Any usage of trade, particularly trade conducted by 9 35 trustworthy systems or other computer-based means.
- 10 1 (5) Whether the authentication was performed with the 10 2 assistance of an independent third party.
- 10 3 (6) Any other evidence relating to facts of which the 10 4 proponent was aware that would suggest that reliance was or 10 5 was not reasonable.
- 10 6 2. The commercial reasonableness of a security procedure 10 7 is to be determined by the trier of fact in light of the 10 8 purposes of the procedure and the commercial circumstances at 10 9 the time the procedure was used, including but not limited to

10 10 the nature of the transaction, sophistication of the parties,

- 10 11 volume of similar transactions engaged in by either or both of
- 10 12 the parties, availability of alternatives offered to but
- 10 13 rejected by either of the parties, cost of alternative
- 10 14 procedures, and procedures in general use for similar types of 10 15 transactions.
- 10 16 Sec. 114. <u>NEW SECTION</u>. 554C.304 PRESUMPTIONS.
- 10 17 1. In resolving a civil dispute involving a secure 10 18 electronic record, it shall be rebuttably presumed that the 10 19 electronic record has not been altered since the specific 10 20 point in time to which the secure status relates.
- 10 21 2. In resolving a civil dispute involving a secure 10 22 electronic signature, all of the following shall be rebuttably 10 23 presumed:
- 10 24 a. The secure electronic signature is the signature of the $10\ 25$ person to whom it correlates.
- 10 26 b. The secure electronic signature was affixed by that 10 27 person with the intention of signing the electronic record.
- 10 28 3. The effect of the presumptions provided in this section 10 29 is to place on the party challenging the integrity of a secure 10 30 electronic record or challenging the genuineness of a secure 10 31 electronic signature both the burden of going forward with 10 32 evidence to rebut the presumption and the burden of persuading 10 33 the trier of fact that the falsity of the presumed fact is 10 34 more probable than the truth of its existence.
- 10 35 4. In the absence of a secure electronic record or a
 11 1 secure electronic signature, nothing in this chapter shall
 11 2 change existing rules regarding legal or evidentiary rules
 11 3 regarding the burden of proving the authenticity and integrity
 11 4 of an electronic record or an electronic signature.
- 11 5 Sec. 115. NEW SECTION. 554C.305 ATTRIBUTION OF SIGNATURE 11 6 TO A PARTY.
- 11 7 1. Except as provided by another applicable rule of law, 11 8 and subject to the provisions of section 554C.304, a secure 11 9 electronic signature is attributable to the person to whom it 11 10 correlates, whether or not authorized, if all of the following 11 11 apply to the electronic signature:
- 11 12 a. The signature resulted from acts of a person who 11 13 obtained the access numbers, codes, computer programs, or 11 14 other information necessary to create the signature from a 11 15 source under the control of the alleged signer, creating the 11 16 appearance that it came from the person to whom it correlates.
- 11 17 b. The access occurred under circumstances constituting a 11 18 failure to exercise reasonable care by the person to whom it 11 19 correlates.
- 11 20 c. The recipient reasonably relied to the recipient's 11 21 detriment on the apparent source of the electronic record, 11 22 taking into account the factors provided in section 554C.303.
- 11 23 2. The provisions of this section shall not apply to 11 24 consumer transactions, including but not limited to credit 11 25 card and automatic teller machines, except to the extent 11 26 allowed by applicable consumer law.
- 11 27 Sec. 116. NEW SECTION. 554C.306 CERTIFICATION BY THE 11 28 COMMISSIONER.
- 11 29 1. A security procedure may be certified by the 11 30 commissioner as meeting the requirements of section 554C.301 11 31 or 554C.302, following an appropriate investigation or review, 11 32 if all of the following apply:
- 11 33 a. The technology utilized by the security procedure is 11 34 completely open and fully disclosed to the public in order to 11 35 facilitate a comprehensive evaluation of its suitability for 12 1 its intended purpose.
- 12 2 b. The certification is in accordance with the rules 12 3 adopted by the commissioner pursuant to chapter 17A.
- 12 4 c. The certification specifies at least all of the 12 5 following:
- 12 6 (1) A full and complete identification of the security

12 7 procedure.

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- 12 8 (2) A specification of one or more acceptable trustworthy 12 9 methods by which the security procedure may be implemented 12 10 consistent with the certification.
- 12 11 (3) A term for the certification which shall not exceed 12 12 five years.
- 12 13 2. At the end of the term for each certified security 12 14 procedure, or earlier as determined by the commissioner, the 12 15 security procedure may be reevaluated in light of then-current 12 16 technology and recertified or decertified as appropriate.

SUBCHAPTER 4

DIGITAL SIGNATURES

12 19 PART 1 12 20 DEFINITIONS

12 21 Sec. 117. <u>NEW SECTION</u>. 554C.401 DEFINITIONS.

12 22 As used in this subchapter, unless the context otherwise 12 23 requires:

- 12 24 1. "Asymmetric cryptosystem" means a computer-based system 12 25 capable of generating and using a key pair, consisting of a 12 26 private key for creating a digital signature, and a public key 12 27 to verify the digital signature.
- 2. "Certificate" means a record that at a minimum provides 12 29 all of the following:
- 12 30 a. Identifies the certification authority issuing the 12 31 certificate.
 - b. Names or otherwise identifies its subscriber.
- c. Contains a public key that corresponds to a private key 12 34 under the control of the subscriber.
 - d. Identifies its operational period.
- e. Is digitally signed by the certification authority 13 1 13 2 issuing the certification.
- 13 3 3. "Certification authority" means a person who authorizes 13 4 and causes the issuance of a certificate.
- 13 5 4. "Certification practice statement" means a statement 13 6 published by a certification authority or person operating a 7 repository that specifies the policies or practices that the 13 8 certification authority employs in issuing, suspending, and 13 9 revoking certificates, and providing access to a certificate.
- 5. "Correspond" means to belong to the same key pair.6. "Digital signature" means a type of an electronic 13 11 13 12 signature consisting of a transformation of an electronic 13 13 record using a message digest function that is encrypted with 13 14 an asymmetric cryptosystem using the signer's private key in a 13 15 manner providing that any person having the initial 13 16 untransformed electronic record, the encrypted transformation,
- 13 17 and the signer's public key may accurately determine all of 13 18 the following:
- 13 19 a. Whether the transformation was created using the 13 20 private key that corresponds to the signer's public key.
- 13 21 b. Whether the initial electronic record has been altered 13 22 since the transformation was made. A digital signature is a 13 23 security procedure.
- 13 24 7. "Key pair" means, in an asymmetric cryptosystem, two 13 25 mathematically related keys, having the properties that 13 26 provide all of the following:
- 13 27 a. One key can encrypt a message which only the other key 13 28 can decrypt.
- b. Even knowing one key, it is computationally infeasible 13 30 to discover the other key.
- 13 31 8. "Message digest function" means an algorithm that maps 13 32 or translates the sequence of bits comprising an electronic
- 13 33 record into another, generally smaller, set of bits, referred
- 13 34 to as the message digest, without requiring the use of any
- 13 35 secret information such as a key, in a manner which provides 14 1 all of the following:
- 14 2 a. A record yields the same message digest every time the 14 3 algorithm is executed using such record as input.

- b. It is computationally infeasible that any two
- 14 5 electronic records can be found or deliberately generated that
- 14 6 would produce the same message digest using the algorithm
- 14 7 unless the two records are identical.
- 9. "Operational period of a certificate" means a period 14 9 beginning and ending as follows:
- 14 10 a. The period begins on the date and at the time the 14 11 certificate is issued by a certification authority or on a
- 14 12 later date and at a time certain if stated in the certificate.
- 14 13 b. The period ends on the date and at the time the
- 14 14 certificate expires as noted in the certificate or on an
- 14 15 earlier date if the certificate is revoked or suspended in 14 16 accordance with this chapter.
- 14 17 10. "Private key" means the key of a key pair used to 14 18 create a digital signature.
- 14 19 11. "Public key" means the key of a key pair used to 14 20 verify a digital signature.
- 14 21 12. "Repository" means a system for storing and retrieving 14 22 certificates or other information relevant to certificates.
- 14 23 13. "Revoke a certificate" means to permanently end the 14 24 operational period of a certificate from a specified time 14 25 forward.
- 14. "Subscriber" means a person to whom all of the 14 27 following applies:
- a. The person is the subject named or otherwise identified 14 29 in a certificate issued to the person.
- b. The person controls a private key that corresponds to 14 31 the public key listed in that certificate.
- c. The digitally signed messages verified by reference to 14 32 14 33 the certificate are to be attributed to the person.
- 15. "Suspend a certificate" means to temporarily suspend 14 35 the operational period of a certificate for a specified time 15 1 period or from a specified time forward.
 - 16. "Trustworthy system" means a system of computer
- 15 3 hardware, software, and procedures that satisfies all of the 15 4 following:
- 15 5 a. Is reasonably secure from intrusion and misuse.b. Provides a reasonable level of availability,
- 15 6 b. Provides a reasonable 15 7 reliability, and correct operation.
- c. Is reasonably suited to performing the system's 15 9 intended functions.
- 15 10 d. Adheres to generally accepted security procedures.
- e. Meets or exceeds the requirements of rules adopted by 15 11 15 12 the commissioner.
- 15 13 17. "Valid certificate" means a certificate that meets the 15 14 following conditions:
- 15 15 a. The certificate has been issued by a certification 15 16 authority.
- 15 17 b. The subscriber listed in the certificate has accepted 15 18 the certificate in accordance with this chapter.
- 15 19 18. "Verify a digital signature" means to use the public 15 20 key listed in a certificate, together with an appropriate
- 15 21 message digest function and public key algorithm, to evaluate
- 15 22 a digitally signed electronic record in order to determine all 15 23 of the following:
- a. That the digital signature was created using the 15 25 private key corresponding to the public key listed in the 15 26 certificate.
- 15 27 b. The electronic record has not been altered since its 15 28 digital signature was created.

15 29 PART 2

15 30 EFFECT OF A DIGITAL SIGNATURE

15 31 Sec. 118. <u>NEW SECTION</u>. 554C.411 SECURE ELECTRONIC 15 32 RECORD.

- 15 33 Subject to the provisions of section 554C.303, an
- 15 34 electronic record or any portion thereof that is signed with a
- 15 35 digital signature shall be considered to be a secure

1 electronic record if the digital signature was created during 16 2 the operational period of a valid certificate and is verified 16 3 by reference to the public key listed in such certificate. 16 4 Sec. 119. <u>NEW SECTION</u>. 554C.412 SECURE ELECTRONIC 16 5 SIGNATURE.

16 6 Subject to the provisions of section 554C.303, when all or 7 any portion of an electronic record is signed with a digital 16 8 signature, the digital signature shall be considered a secure 16 9 electronic signature with respect to all or that portion of 16 10 the record, if all of the following apply:

- 16 11 1. The digital signature was created during the 16 12 operational period of a valid certificate, was used within any 16 13 limits specified or incorporated by reference in the 16 14 certificate, and can be verified by reference to the public 16 15 key listed in the certificate.
- 16 16 2. The certificate shall be considered trustworthy, if one 16 17 of the following is determined by the trier of fact:
- 16 18 a. The certificate was issued by a certification authority 16 19 in accordance with standards, procedures, and other 16 20 requirements specified by rule of the commissioner.
- 16 21 b. A trier of fact independently finds one of the 16 22 following:
- (1) That the certificate was issued in a trustworthy 16 24 manner by a certification authority that properly 16 25 authenticated the subscriber and the subscriber's public key.
- (2) The material information set forth in the certificate 16 27 is true.
- 16 28 3. The process and systems utilized to create and verify a 16 29 digital signature are considered trustworthy because one of 16 30 the following applies:
- a. They comply with standards, procedures, and other 16 31 16 32 requirements specified by the commissioner.
- 16 33 b. A trier of fact independently finds that they are 16 34 trustworthy.
- 16 35 Sec. 120 <u>NEW SECTION</u>. 554C.413 COMMISSIONER AUTHORITY TO 17 1 ADOPT RULES.
- 17 2 1. The commissioner may adopt rules applicable to the 3 public or private sector which define when a certificate and a 4 digital signature is considered sufficiently trustworthy in 17 5 order to ensure that a digital signature verified by reference 17 6 to the certificate will qualify as a secure electronic 7 signature. The rules may include but are not limited to any 17 8 of the following:
- 17 9 a. Establishing or adopting standards applicable to 17 10 certification authorities or certificates. Compliance with 17 11 the standards may be measured by obtaining a voluntary 17 12 certification from the commissioner or becoming accredited by 17 13 one or more independent accrediting entities recognized by the 17 14 commissioner.
- 17 15 b. Establishing or adopting standards applicable to the 17 16 digital signature creation or verification process.
- 17 17 2. In adopting rules as provided in this section, the 17 18 commissioner shall consult with the office of the attorney 17 19 general and representatives of the division of information 17 20 technology services of the department of general services. 17 21 The commissioner shall adopt rules that will provide maximum 17 22 flexibility in the implementation of digital signature 17 23 technology and the business models necessary to support it, 17 24 establish a clear basis for the recognition of certificates 17 25 issued by foreign certification authorities, and, to the 17 26 extent reasonably possible, maximize the opportunities for 17 27 uniformity with the laws of other jurisdictions, both within 17 28 the United States and internationally.

17 29 PART 3

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17 30 DUTIES GENERALLY

17 31 Sec. 121. NEW SECTION. 554C.421 RELIANCE ON 17 32 CERTIFICATES.

A person relying on a digital signature may also rely on a 17 34 valid certificate containing the public key by which the 17 35 digital signature can be verified.

Sec. 122. NEW SECTION. 554C.422 RESTRICTIONS ON 18 2 PUBLICATION OF CERTIFICATE.

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18 3 A person shall not publish a certificate, or otherwise make 18 4 it available to anyone known by that person to be in a 18 5 position to rely on the certificate or on a digital signature 18 6 that is verifiable with reference to the public key listed in 7 the certificate, if that person knows that any of the 18 8 following apply:

- 18 9 1. The certification authority listed in the certificate 18 10 has not issued the certificate.
- 2. The subscriber listed in the certificate has not 18 11 18 12 accepted the certificate.
- 18 13 3. The certificate has been revoked or suspended, unless 18 14 the publication is for the purpose of verifying a digital 18 15 signature created prior to such suspension or revocation.

Sec. 123. <u>NEW SECTION</u>. 554C.423 FRAUDULENT PURPOSE.

18 17 A person shall not knowingly create, publish, alter, or 18 18 otherwise use a certificate for a fraudulent or other unlawful 18 19 purpose. A person convicted of violating this section is 18 20 guilty of a serious misdemeanor. A person convicted of a 18 21 second or subsequent violation is guilty of a class "D" 18 22 felony.

Sec. 124. NEW SECTION. 554C.424 FALSE OR UNAUTHORIZED 18 23 18 24 REQUEST.

18 25 A person shall not knowingly misrepresent the person's 18 26 identity or authorization in requesting or accepting a 18 27 certificate or in requesting suspension or revocation of a 18 28 certificate. A person convicted of violating this section is 18 29 guilty of a serious misdemeanor. A person convicted of a 18 30 second or subsequent violation is guilty of a class "D" 18 31 felony.

PART 4

DUTIES OF CERTIFICATION AUTHORITIES AND REPOSITORIES Sec. 125. <u>NEW SECTION</u>. 554C.431 TRUSTWORTHY SYSTEM.

A certification authority and a person maintaining a 19 1 repository shall utilize a trustworthy system in performing 19 2 their services. 19 3 Sec. 126. N

Sec. 126. <u>NEW SECTION</u>. 554C.432 DISCLOSURE.

- 1. For each certificate it issues, a certification 19 4 19 5 authority must publish to relying parties all of the 19 6 following:
- 19 7 a. Its certification practice statement, if the authority 19 8 has one.
- 19 9 b. Its certification authority certificate that identifies 19 10 the certification authority as a self-certifying subscriber 19 11 and that contains the public key corresponding to the private 19 12 key used by that certification authority to digitally sign the 19 13 certificate.
- 19 14 c. Notice of a revocation or suspension of its 19 15 certification authority certificate, and any other fact 19 16 material relating to either the reliability of a certificate 19 17 that it has issued or its ability to perform its services.
- 2. In the event of an occurrence that materially and 19 19 adversely affects a certification authority's trustworthy 19 20 system or its certification authority certificate, the 19 21 certification authority must do all of the following:
- a. Use reasonable efforts to notify persons who are known 19 23 to be or foreseeably will be affected by that occurrence.
- 19 24 b. Act in accordance with procedures governing this type 19 25 of occurrence specified in its certification practice 19 26 statement.
- 19 27 3. If a certification authority certifies itself as a 19 28 certification authority, it shall disclose to all relying 19 29 parties that it is self-certified. The certification

19 30 authority shall publish a copy of its own certification

- 19 31 authority certificate that is verifiable by reference to a
- 19 32 public key listed in a certificate issued by the certification 19 33 authority.
- 19 34 Sec. 127. NEW SECTION. 554C.433 ISSUANCE OF A 19 35 CERTIFICATE.
- 20 1 A certification authority may issue a certificate to a 2 prospective subscriber for the purpose of verifying digital 20 3 signatures only after the certification authority does all of 20 4 the following:
- 20 5 1. Receives a request for the issuance from the 20 6 prospective subscriber.
 - 2. Does either of the following:
- 20 7 20 8 a. Complies with all of the practices and procedures set 20 9 forth in its applicable certification practice statement, 20 10 including procedures regarding identification of the 20 11 perspective subscriber.
- 20 12 b. In the absence of a certification practice statement, 20 13 confirms one of the following:
- 20 14 (1) The prospective subscriber is the person to be listed 20 15 in the certificate to be issued.
- 20 16 (2) The information in the certificate to be issued is 20 17 accurate.
- (3) The prospective subscriber rightfully holds a private 20 19 key capable of creating a digital signature, and the public 20 20 key to be listed in the certificate can be used to verify a 20 21 digital signature affixed by such private key.
- Sec. 128. <u>NEW SECTION</u>. 554C.434 REPRESENTATIONS UPON 20 23 ISSUANCE OF CERTIFICATE.
- 20 24 By issuing a certificate, a certification authority 20 25 represents to any person who reasonably relies on the 20 26 certificate or a digital signature verifiable by the public 20 27 key listed in the certificate, that the certification 20 28 authority has issued the certificate in accordance with any 20 29 applicable certification practice statement stated or 20 30 incorporated by reference in the certificate, or of which the 20 31 relying person has notice, and the requirements and 20 32 representations imposed by the law under which it was issued.
- 20 33 In the absence of a certification practice statement or law, 20 34 the certification authority represents that as of the time the 20 35 certificate is issued it has confirmed all of the following: 1. The certification authority has complied with all 21 1
- 21 2 applicable requirements of this chapter in issuing the 21 3 certificate, and if the certification authority has published 21 4 the certificate or otherwise made it available to a relying 21 5 person, that the subscriber identified in the certificate has 21 6 accepted it.
- 21 7 2. The subscriber identified in the certificate, 21 8 rightfully holds the private key corresponding to the public 21 9 key listed in the certificate.
- 3. The subscriber's public key and private key constitute 21 10 21 11 a functioning key pair.
- 4. All information in the certificate is accurate as of 21 13 the date it was issued, unless the certification authority has 21 14 stated in the certificate or incorporated by reference in the 21 15 certificate a statement that the accuracy of specified 21 16 information is not confirmed.
- 5. To the knowledge of the certification authority, there 21 18 are no known material facts omitted from the certificate which 21 19 would, if known, adversely affect the reliability of the 21 20 representations required to be provided by the certification 21 21 authority under this section.
- Sec. 129. <u>NEW SECTION</u>. 554C.435 SUSPENSION OF A 21 23 CERTIFICATE.
- 21 24 The certification authority that issues a certificate, and 21 25 any person maintaining a repository where the certificate is 21 26 published, shall suspend the certificate pursuant to any of

21 27 the following:

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22 3

- 21 28 1. The receipt of an order issued by a court of competent 21 29 jurisdiction.
- 21 30 2. In accordance with the policies and procedures
- 21 31 governing suspension specified in its certification practice
- 21 32 statement. In the absence of policies and procedures
- 21 33 governing suspension, the certificate shall be suspended as
- 21 34 soon as possible after receiving a request by a person whom
- 21 35 the certification authority or person maintaining a repository 22 1 reasonably believes to be any of the following:
 - a. The subscriber listed in the certificate.
 - b. A person duly authorized to act for that subscriber.
- 22 4 c. A person acting on behalf of that subscriber, who is 22 5 unavailable.
- 22 6 Sec. 130. <u>NEW SECTION</u>. 554C.436 REVOCATION OF A 22 7 CERTIFICATE.

22 8 The certification authority that issues a certificate, and 22 9 any person maintaining a repository where the certificate is 22 10 published, shall revoke the certificate pursuant to any of the 22 11 following:

- 22 12 1. Upon receipt of an order issued by a court of competent 22 13 jurisdiction.
- 22 14 2. In accordance with the policies and procedures 22 15 governing revocation specified in its certification practice 22 16 statement. In the absence of policies and procedures 22 17 governing revocation, the certificate shall be revoked as soon 22 18 as possible after one of the following occurs:
- 22 19 a. Receipt of a request for revocation by the subscriber 22 20 named in the certificate, if the certification authority or 22 21 repository confirms that the person requesting the revocation 22 22 is the subscriber or is an agent of the subscriber with 22 23 authority to request the revocation.
- 22 24 b. Receipt of a certified copy of an individual 22 25 subscriber's death certificate, or upon confirmation by other 22 26 reliable evidence that the subscriber is dead.
- 22 27 c. Presentation of documents effecting a dissolution of a 22 28 corporate subscriber, or upon confirmation by other evidence 22 29 that the subscriber has been dissolved or has ceased to exist.
- 22 30 d. Confirmation by the certification authority that one of 22 31 the following applies:
- 22 32 (1) A material fact represented in the certificate is 22 33 false.
- 22 34 $\,$ (2) A material prerequisite to issuance of the certificate 22 35 was not satisfied.
- 23 1 (3) The certification authority's private key or 23 2 trustworthy system was compromised in a manner materially 23 3 affecting the certificate's reliability.
- 23 4 (4) The subscriber's private key or trustworthy system was 23 5 compromised.

Upon effecting a revocation, the certification authority shall promptly notify the subscriber listed in the revoked certificate of the revocation.

23 9 Sec. 131. NEW SECTION. 554C.437 NOTICE OF SUSPENSION OR 23 10 REVOCATION.

23 11 Upon suspending or revoking a certificate, a person 23 12 maintaining a repository where the certificate is published 23 13 shall do all of the following:

- 23 14 1. Promptly publish notice of the suspension or revocation 23 15 if the certificate was published.
- 23 16 2. Disclose the fact of suspension or revocation on 23 17 inquiry by a relying party.

23 18 PART 5

23 19 DUTIES OF SUBSCRIBERS

23 20 Sec. 132. <u>NEW SECTION</u>. 554C.441 GENERATING THE KEY PAIR.

23 21 If the subscriber generates the key pair whose public key

23 22 is to be listed in a certificate issued by a certification

23 23 authority and accepted by the subscriber, the subscriber must

23 24 generate that key pair and maintain and store the private key 23 25 using a trustworthy system.

Sec. 133. <u>NEW SECTION</u>. 554C.442 OBTAINING A CERTIFICATE. 23 26

23 27 All material representations made by the subscriber to a 23 28 certification authority for purposes of obtaining a

23 29 certificate must be accurate and complete.

23 30 Sec. 134. NEW SECTION. 554C.443 ACCEPTANCE OF A 23 31 CERTIFICATE.

- 23 32 1. A person accepts a certificate that names a person as a 23 33 subscriber by publishing it to one or more persons, depositing 23 34 the certificate in a repository, or demonstrating approval of 23 35 the certificate, while knowing or having notice of its 24 1 contents.
- 24 2 2. By accepting a certificate, the subscriber listed in 24 3 the certificate represents to all who reasonably rely on the 24 4 information contained in the certificate that all of the 24 5 following apply:
- 24 6 a. The subscriber rightfully holds the private key 24 7 corresponding to the public key listed in the certificate.
- b. All representations made by the subscriber to the 24 8 24 9 certification authority and material to the information listed 24 10 in the certificate are true.
- c. All information in the certificate that is within the 24 12 knowledge of the subscriber is true.
- Sec. 135. NEW SECTION. 554C.444 CONTROL OF THE PRIVATE 24 13 24 14 KEY.
- 24 15 1. Except as otherwise provided by another applicable rule 24 16 of law, by accepting a certificate issued by a certification 24 17 authority the subscriber identified in the certificate assumes 24 18 a duty to persons who reasonably rely on the certificate to 24 19 exercise reasonable care to retain control of the private key 24 20 corresponding to the public key listed in the certificate and 24 21 to prevent its disclosure to a person not authorized to create 24 22 the subscriber's digital signature. The requirements of this 24 23 subsection shall continue during the operational period of the 24 24 certificate.
- 24 25 2. The provisions of this section do not apply to consumer 24 26 transactions.
- Sec. 136. <u>NEW SECTION</u>. 554C.445 INITIATING SUSPENSION OR 24 27 24 28 REVOCATION.
- Except as otherwise provided by another applicable rule of 24 29 24 30 law, if the private key corresponding to the public key listed 24 31 in a certificate is compromised during the operational period 24 32 of the certificate, a subscriber who has accepted the 24 33 certificate shall do one of the following:
- 24 34 1. Request the issuing certification authority, and all 24 35 independent repositories in which the subscriber has 25 1 authorized the certificate to be published, to suspend or 25 2 revoke the certificate.

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25 3 2. Provide reasonable notice to all relying parties that 25 4 the public key listed in the certificate was compromised 25 5 during the operational period of the certificate.

PART 6

GOVERNMENT AGENCY USE OF ELECTRONIC RECORDS AND SIGNATURES Sec. 137. <u>NEW SECTION</u>. 554C.451 GOVERNMENT AGENCY USE OF 25 9 ELECTRONIC RECORDS.

- 1. Each government agency shall determine if, and the 25 11 extent to which, it will send and receive electronic records 25 12 and electronic signatures to and from other persons.
- 2. In any case where a government agency decides to send 25 14 or receive electronic records, or to accept document filings 25 15 by electronic records, the government agency may, by rule, 25 16 giving due consideration to security, specify any of the 25 17 following:
- 25 18 a. The manner and format in which electronic records must 25 19 be sent, received, and stored, including interoperability 25 20 requirements.

- b. If electronic records must be signed, the type of 25 22 electronic signature required including, if applicable, a 25 23 requirement that the sender use a digital signature or other 25 24 secure electronic signature, the manner and format in which 25 25 the electronic signature must be affixed to the electronic 25 26 record, and the identity of or criteria that must be met by a 25 27 certification authority used by the person filing the 25 28 document.
- 25 29 c. Control processes and procedures which are appropriate 25 30 to ensure adequate integrity, security, confidentiality, and 25 31 auditability of electronic records.
- d. Any other required attributes for electronic records 25 33 that are currently specified for corresponding paper 25 34 documents, or reasonably necessary under the circumstances.
- 25 35 3. All rules adopted by a government agency shall be 26 1 consistent with the rules adopted by the commissioner. 26 2 Sec. 138. <u>NEW SECTION</u>. 554C.452 COMMISSIONER TO ADOPT 26 3 STATE STANDARDS.
- 1. The commissioner, in consultation with the office of 26 4 26 5 the attorney general and the division of information 26 6 technology services of the department of general services, 26 7 shall adopt rules setting forth standards, procedures, and 26 8 policies for the use of electronic records and electronic 26 9 signatures by government agencies. Where appropriate, the 26 10 rules shall specify different levels of standards from which 26 11 implementing government agencies can select the standard most 26 12 appropriate for a particular application.
- 2. The commissioner shall specify appropriate procedural 26 14 and technical security requirements to be implemented and 26 15 followed by government agencies for all of the following:
 - a. The generation, use, and storage of key pairs.
- b. The issuance, acceptance, use, suspension, and 26 17 26 18 revocation of certificates.
- c. The use of digital signatures.3. Each government agency shall have the authority to 26 20 26 21 issue, or contract for the issuance of, certificates to all of 26 22 the following:
- 26 23

26 16

26 19

- a. Its employees and agents.b. Persons conducting business or other transactions with 26 24 $26\ 25$ the government agency. The government agency may take other 26 26 actions consistent with this authority, including the 26 27 establishment of repositories and the suspension or revocation 26 28 of issued certificates, provided that actions by the 26 29 government agency are conducted in accordance with all rules, 26 30 procedures, and policies specified by the commissioner. The 26 31 commissioner may adopt rules, procedures, and policies under 26 32 which government agencies may issue or contract for the 26 33 issuance of certificates, or restrict or prohibit their 26 34 issuance.
- 26 35 4. The commissioner may specify appropriate standards and 27 1 requirements that must be satisfied by a certification 27 2 authority before any of the following occur:
- 27 3 a. The services of a certification authority are used by a 27 4 government agency for the issuance, publication, suspension, 27 5 or revocation of certificates to the government agency, 27 6 including its employees or agents, for official use only.
- 27 7 b. The certificates that the certification authority 27 8 issues are accepted for purposes of verifying digitally signed 27 9 electronic records sent to any government agency by any 27 10 person.
- 27 11 Sec. 139. <u>NEW SECTION</u>. 554C.453 INTEROPERABILITY.
- To the extent reasonable under the circumstances, rules 27 12 27 13 adopted by the commissioner or a government agency relating to 27 14 the use of electronic records or electronic signatures shall
- 27 15 be drafted in a manner designed to encourage and promote
- 27 16 consistency and interoperability with similar requirements
- 27 17 adopted by government agencies of other states and the federal

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27 18 government.
27 19
                               DIVISION II
27 20
                          CONFORMING PROVISIONS
27 21
         Sec. 201. Section 22.7, Code Supplement 1997, is amended
27 22 by adding the following new subsection:
        NEW SUBSECTION. 38. a. Records containing information
27 24 that would disclose, or might lead to the disclosure of,
27 25 private keys as provided in section 554C.
        b. Records which if disclosed might jeopardize the
27 27 security of an issued certificate or a certificate to be
27 28 issued pursuant to chapter 554C.
27 29
         Sec. 202. COMMISSIONER REQUIRED TO ADOPT RULES. The
27 30 commissioner of insurance shall adopt rules as required by
27 31 this Act not later than July 1, 1999.
27 32
                                EXPLANATION
27 33
         This bill relates to electronic commerce security.
27 34
         The bill creates a new Code chapter relating to electronic
27 35 commerce referred to as new Code chapter 554C.
        New Code section 554C.101 provides the short title for the
28 1
28 2 chapter, referred to as the "Iowa Electronic Commerce Security
28 3 Act".
28 4
        New Code section 554C.102 provides for the purposes and
28 5 construction of the chapter. The bill provides that the
28 6 chapter must be construed consistently with what is
28 7 commercially reasonable under the circumstances to effectuate
28 8 electronic communications by means of reliable electronic
28 9 records; facilitate and promote electronic commerce by
28 10 eliminating certain present barriers; facilitate the
28 11 electronic filing of documents with state and local government
28 12 agencies; minimizing the incidence of forged electronic
28 13 records; establishing uniformity of regulations and standards;
28 14 promoting public confidence in the integrity, reliability, and
28 15 legality of electronic records and electronic commerce.
         New Code section 554C.103 provides for variation by
28 16
28 17 agreement between parties involved in generating, sending,
28 18 receiving, storing, or otherwise processing electronic
28 19 records. The bill provides certain exceptions. It also
28 20 provides that the bill is not to be construed to require a
28 21 person to engage in electronic commerce.
         New Code section 554C.201 provides for definitions as used
28 23 in the chapter, including the definitions for electronic
28 24 record and electronic signature. An "electronic record" is
28 25 defined to means a record generated, communicated, received,
28 26 or stored by electronic means. An "electronic signature"
28 27 means a signature in electronic form attached to or logically
28 28 associated with an electronic record.
28 29
         New Code section 554C.202 provides that information cannot
28 30 be denied legal effect solely on the grounds that it is in the
28 31 form of an electronic record or an electronic signature.
         New Code section 554C.203 provides that where a rule of law
28 32
28 33 requires information to be written, or in writing, an
28 34 electronic record satisfies that rule of law. This
28 35 requirement does not apply to the construction of a rule of
29
   1 law that would be inconsistent with its purpose.
29 2
         New Code section 554C.204 provides that where a rule of law
   3 requires a signature, an electronic signature satisfies that
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1 law that would be inconsistent with its purpose.

2 New Code section 554C.204 provides that where a rule of law

3 requires a signature, an electronic signature satisfies that

4 rule of law. This requirement does not apply to defeat an

5 expressed purpose of a rule of law; the creation or execution

6 of a will or trust, living will, general, durable, or

7 healthcare power of attorney, a voluntary, involuntary, or

8 standby guardianship or conservatorship; any record that

9 serves as a unique and transferable physical expression of

10 rights and obligations in consumer transactions; or any record

11 that grants a legal or equitable interest in real property in

12 consumer transactions.

New Code section 554C.205 provides that where a rule of law

29 14 requires information to be presented or retained in its

29 15 original form that rule of law is satisfied by an electronic 29 16 record if there exists reliable assurance as to the integrity 29 17 of the information.

29 18 New Code section 554C.206 provides that in any legal
29 19 proceeding, nothing in the application of the rules of
29 20 evidence shall apply to deny the admissibility of an
29 21 electronic record or electronic signature into evidence based
29 22 on the sole ground that it is an electronic record or
29 23 electronic signature or it is not in its original form with
29 24 some exceptions. The section provides that information in the
29 25 form of an electronic record must be given due evidential
29 26 weight by the trier of fact.

29 27 New Code section 554C.207 provides that where a rule of law 29 28 requires that certain documents, records, or information be 29 29 retained that requirement is met by retaining electronic 29 30 records of the information.

29 31 New Code section 554C.301 provides for securing electronic 29 32 records by utilizing a qualified security procedure which 29 33 detects changes in the information's content.

29 34 New Code section 554C.302 provides for secure electronic 29 35 signatures. It provides that an electronic signature shall be 30 1 considered to be a secure electronic signature if executed 30 2 utilizing a qualified security procedure.

New Code section 554C.303 provides additional requirements for 4 for secure status information. It provides requirements for 5 proving that an electronic record or electronic signature 6 qualifies for secure status, including providing for special 7 procedures. The bill provides that the security procedure 8 must be commercially reasonable, as determined by the trier of 9 fact.

30 10 New Code section 554C.304 provides for a rebuttable
30 11 presumption when resolving a civil dispute involving a secure
30 12 electronic record. The bill provides for a rebuttable
30 13 presumption relating to alterations of an electronic record
30 14 and the legitimacy of an electronic signature. The effect of
30 15 the presumption is to place on the party challenging the
30 16 integrity of a secure electronic record or challenging the
30 17 genuineness of a secure electronic signature both the burden
30 18 of going forward with evidence to rebut the presumption and
30 19 the burden of persuading the trier of fact that the falsity of
30 20 the presumed fact is more probable than the truth of its
30 21 existence.

New Code section 554C.305 provides that a secure electronic signature is attributable to the person to whom it correlates. The attribution may apply whether or not authorized, when the access occurred under circumstances constituting a failure to exercise reasonable care and the recipient reasonably relied to the recipient's detriment on the apparent source of the electronic record. Consumer transactions are excluded from this provision.

New Code section 554C.306 provides that a security 30 31 procedure may be certified by the commissioner of insurance if 30 32 the technology utilized by the security procedure is 30 33 completely open and fully disclosed to the public, the 30 34 certification is in accordance with the rules adopted by the 30 35 commissioner, and the certification complies with requirements 1 relating to its trustworthiness.

31 2 New Code section 554C.401 provides a number of special 31 3 definitions which apply to digital signatures.

31 4 New Code section 554C.411 provides that an electronic 31 5 record that is signed with a digital signature is considered 31 6 to be a secure electronic record if the digital signature was 31 7 created during the operational period of a valid certificate 31 8 issued by the commissioner.

31 9 New Code section 554C.412 provides that when an electronic 31 10 record is signed with a digital signature, the digital 31 11 signature is considered a secure electronic signature if it

31 12 meets certain requirements. It must have been created during 31 13 the period when a valid certificate was issued by a 31 14 certification authority in accordance with standards, 31 15 procedures, and other requirements specified by rule of the 31 16 commissioner of insurance, or found to be trustworthy by the

31 17 findings of a trier of fact.

31 18 New Code section 554C.413 provides that the commissioner of 31 19 insurance may adopt rules applicable to the public or private 31 20 sector which define when a certificate and a digital signature 31 21 are considered sufficiently trustworthy.

31 22 New Code section 554C.421 provides that a person relying on 31 23 a digital signature may also rely on a valid certificate 31 24 containing a public key by which the digital signature can be 31 25 verified.

31 26 New Code section 554C.422 prohibits a person from 31 27 publishing or making available a certificate if that person 31 28 knows that the certification authority listed in the 31 29 certificate has not issued the certificate, the subscriber 31 30 listed in the certificate has not accepted the certificate, or 31 31 the certificate has been revoked or suspended.

31 32 New Code section 554C.423 prohibits a person from knowingly 31 33 creating, publishing, altering, or otherwise using a 31 34 certificate for a fraudulent or other unlawful purpose. A 31 35 person convicted of violating this section is guilty of a 32 1 serious misdemeanor. A person convicted of a second or 32 2 subsequent violation is guilty of a class "D" felony.

New Code section 554C.424 prohibits a person from knowingly misrepresenting the person's identity or authorization in requesting or accepting a certificate or in requesting suspension or revocation of a certificate. A person convicted for violating this section is guilty of a serious misdemeanor. A person convicted of a second or subsequent violation is guilty of a class "D" felony.

New Code section 554C.431 provides that a person designated 12 11 as a certification authority and a person maintaining a 12 repository must utilize a trustworthy system in performing 12 13 their services.

32 14 New Code section 554C.432 provides for disclose to parties 32 15 relying upon a certification, a certification practice 32 16 statement, a certification authority certification, and a 32 17 notice of a revocation or suspension of its certification 32 18 authority certificate.

32 19 New Code section 554C.433 provides for the issuance of a 32 20 certificate to a prospective subscriber for the purpose of 32 21 verifying digital signatures.

New Code section 554C.434 provides that by issuing a certificate, a certification authority represents to any 24 person who reasonably relies on the certificate or a digital 25 signature verifiable by the public key listed in the 26 certificate, that the certification authority has issued the 27 certificate in accordance with any applicable certification 28 practice statement. The statement shall provide that the 29 certification authority has complied with all applicable 30 requirements of the bill and that all information in the 32 31 certificate is accurate.

32 32 New Code section 554C.435 provides for the suspension of a 32 33 certificate by the certification authority that issues a 32 34 certificate.

New Code section 554C.436 provides that the certification
authority that issues a certificate, and any person
maintaining a repository where the certificate is published,
must revoke the certificate upon receipt of an order issued by
a court of competent jurisdiction or in accordance with the
policies and procedures governing revocation specified in its
certification practice statement.

 $\,$ 33 $\,$ 7 $\,$ New Code section 554C.437 provides for a notice of $\,$ 8 suspension or revocation.

33 9 New Code section 554C.441 provides that if a subscriber 33 10 generates the key pair whose public key is to be listed in a 33 11 certificate issued by a certification authority and accepted 33 12 by the subscriber, the subscriber must generate that key pair 33 13 and maintain and store the private key using a trustworthy 33 14 system.

New Code section 554C.442 provides that all material 33 16 representations made by the subscriber to a certification 33 17 authority for purposes of obtaining a certificate must be 33 18 accurate and complete.

33 19 New Code section 554C.443 provides that a person accepts a 33 20 certificate that names a person as a subscriber by publishing 33 21 it to one or more persons, depositing the certificate in a 33 22 repository, or demonstrating approval of the certificate, 33 23 while knowing or having notice of its contents.

New Code section 554C.444 provides that by accepting a 25 certificate issued by a certification authority the subscriber 26 identified in the certificate assumes a duty to persons who 27 reasonably rely on the certificate to exercise reasonable care 28 to retain control of the private key corresponding to the 29 public key listed in the certificate and to prevent its 30 disclosure to an unauthorized person. The provisions of this 31 section do not apply to consumer transactions.

33 32 New Code section 554C.445 provides that if a private key 33 33 corresponding to the public key listed in a certificate is 33 34 compromised during the operational period of the certificate, 33 35 a subscriber who has accepted the certificate must take 34 1 security actions to protect relying parties.

34 2 New Code section 554C.451 provides that each government 34 3 agency must determine if, and the extent to which, it will 34 4 send and receive electronic records and electronic signatures 34 5 to and from other persons.

New Code section 554C.452 provides that the commissioner of insurance, in consultation with the office of the attorney general and the division of information technology services of the department of general services, shall adopt rules setting forth standards, procedures, and policies for the use of lectronic records and electronic signatures by government agencies.

New Code section 554C.453 provides that rules adopted by the insurance commissioner or a government agency relating to the use of electronic records or electronic signatures must be drafted in a manner designed to encourage and promote consistency and interoperability with similar requirements adopted by government agencies of other states and the federal government.

The bill provides conforming amendments. The bill requires that the commissioner of insurance adopt rules as required by the bill not later than July 1, 1999.

34 23 LSB 3386XL 77

34 24 da/jw/5