

## xyzmo's Products

enable compliancy with the following laws and standards

### 1. Uniform Electronic Transactions Act – UETA (covers US State Law)

UETA was adopted by all US states, except Georgia, Illinois, New York and Washington (however, they do have laws recognizing electronic signatures, i.e. NY State's Electronic Signatures & Records Act ); UETA supersedes E-Sign Act if the specific state has adopted the official version of UETA

The primary objective of UETA is to establish the legal equivalence of electronic records and signatures with paper writings and written signatures, removing barriers to electronic commerce

Three provisions of UETA are very important:

- ❖ A record or signature may not be denied legal effect or enforceability solely because it is in electronic form
  - ❖ If a law requires writing, an electronic record satisfies the law
  - ❖ If a law requires a signature, an electronic signature (typed names, a click-through on a software program's dialog box combined with some other identification procedure, biometric measurements, a complex, encrypted authentication system) satisfies the law
- An electronic signature is an electronic sound, symbol, or process attached to, or logically associated with a record and executed or adopted by a person with the intent to sign the record

### 2. Electronic Signatures in Global and National Commerce Act - E-SIGN (covers US Federal and State Law)

The E-Sign Act is limited to commercial and business transactions in or affecting interstate commerce and adopts the most significant UETA provisions. The general intent of the E-SIGN Act is spelled out in the very first section 101.a), that a contract or signature "may not be denied legal effect, validity, or enforceability solely because it is in electronic form"

The E-SIGN is a nationwide standard that gives digital signatures the same legal force as written signatures. This legislation enables consumers, businesses, and government organizations to use the World Wide Web to engage in transactions that require a personal signature

Section 101(c) (1) (C) (ii) especially proves to be an effective tool to prevent fraud and increase consumer confidence in the marketplace

### 3. Sarbanes-Oxley Act (US)

The most contentious aspect of SOX is Section 404, which requires management and the external auditor to report on the adequacy of the company's internal control over financial reporting (ICFR). This is the most costly aspect of the legislation for companies to implement, as documenting and testing important financial manual and automated controls requires enormous effort

### 4. Government Paperwork Elimination Act (US)

The Government Paperwork Elimination Act does not apply to commercial or business transactions; rather it is directed at the interface between the government and its citizens relating to governmental affairs

### 5. Electronic Signatures & Records Act (ESRA – NY State adoption of UETA)

ESRA provides that signatures made via electronic means will be legally binding just as hand-written signatures. The law also enhances and clarifies the authority of government to create and retain records in computer produced electronic form

### 6. Federal Information Processing Standards Publication (FIPS - US & Canada)

- FIPS PUB 140-2, Security Requirements for Cryptographic Modules: This publication provides a standard that will be used by Federal organizations when these organizations specify that cryptographic-based security systems are to be used to provide protection for sensitive or valuable data. Protection of a cryptographic module within a security system is necessary to maintain the confidentiality and integrity of the information protected by the module
- FIPS PUB 180-1, Secure Hash Standard: this standard specifies a standard, SHA-1, for computing a condensed representation of a message or a data file
- FIPS PUB 186-2, Digital Signature Standard: this standard specifies algorithms appropriate for applications requiring a digital, rather than written, signature

### 7. Health Insurance Portability and Accountability Act (HIPAA) & the Security Rule of 2003 (US)

Protects health insurance coverage for workers and their families when they change or lose their jobs (Title I) and requires the establishment of national standards for electronic health care transactions and national identifiers for providers, health insurance plans, and employers (Title II). The Security Rule deals with Electronic Protected Health Information and complements the Privacy Rule which is part of the HIPAA. Under "Technical Safeguards," the Security Rule states that "data corroboration, including the use of check sum, double-keying, message authentication, and digital signature may be used to ensure data integrity"

### 8. UCC Article 9-105 (US)

This provision of UCC Article 9 on Security Instruments enables the use of electronic documents for equipment leasing and financing contracts. This is referred to as electronic

chattel and is very similar in wording to the sections in E-SIGN and UETA covering electronic notes

#### 9. National Archives and Records Administration (NARA) (US)

NARA publishes a number of guidance documents relating to electronic records management including guidance for agencies implementing electronic signatures and records

#### 10. Electronic Recording for County Records (US)

There are many documents handled by county recorders. The most important are real estate documents that consume the majority of their time and could be streamlined with electronic recording. There has been a patchwork of laws throughout various states to allow for various levels of electronic recording. Recently, a uniform model law was introduced known as the Uniform Real Property Electronic Recording Act

#### 11. USA PATRIOT Act (US)

Enacted following 9/11, this law contains a wide variety of provisions. Section 326, Verification of Identification has implications of systems using electronic records and signatures. This section applies to account openings in financial institutions and requires that the identity of the applicant be verified. With an electronic system, appropriate techniques using electronic verification will be required to authenticate an applicant using an electronic record and signature

#### 12. 21 CFR Part 11 (US)

- Deals with the FDA guidelines on electronic records and electronic signatures;
- With respect to records required to be maintained under predicate rules (predicate rules refer to any FDA regulation that requires organizations to maintain records) or submitted to FDA, when persons choose to use records in electronic format in place of paper format, part 11 would apply
- The requirements of part 11 refer to *validation, audit trail, copies of records, and record retention*
- The law is only partly enforced and currently undergoes a process of revision

#### 13. Personal Information Protection and Electronic Documents Act (PIPED - Canada)

A secure electronic signature has the following characteristics: is unique to a signer; the signer can be verified ; it may be determined whether the item was altered after the signature was affixed; third party authorities often provide independent verification; they are usually encrypted; the application of the signature is under the signer's control

#### 14. Provincial & Territorial Electronic Commerce Acts (Canada)

- Electronic Commerce Act (EDA - Ontario):

- ❖ Information shall not be denied legal effect or enforceability solely by reason that it is in electronic form;
- ❖ "Electronic signature" means information in electronic form that a person has created or adopted in order to sign a document and that is in, attached to or associated with the document;
- ❖ "Electronic" includes created, recorded, transmitted or stored in digital form or in other intangible form by electronic, magnetic or optical means or by any other means that has capabilities for creation, recording, transmission or storage similar to those means

#### 15. EU Directive & Local European Laws (EU)

The **European Union Directive 1999/93/EC** regulates the basics of using electronic signatures in the European Union. This directive is implemented by the local laws of the European Parliament's member countries