Electronic transactions & Electronic Signatures

Professor Ian Walden

Centre for Commercial Law Studies, Queen Mary, University of London Of Counsel, Baker & McKenzie



Introductory remarks

- Regulation as facilitation
 - Cultural constraints, inertia & ignorance
- Legal acts and communications
 - from transactions (c2b, b2b) to eGovernment....
- · Issues of validity, enforceability & admissibility
- Establishing legal certainty
 - liberalise, preserve, abolition
- Regulation as road-block

Law reform

International

- United Nations Convention (2005)
 - Model Law on Electronic Commerce (1996)
 - Model Law on Electronic Signatures (2001)
- Commonwealth Model Law on Electronic Transactions (2003)

National

- Barbados (2001), Costa Rica (2005), Jamaica (2006), Saint Lucia (2011), Trinidad & Tobago (2011)
 - Drafts: El Salvador, Guyana, Suriname

Contract formation

- Validity
 - Exceptions?, eg. real estate, wills and family law
- Methods of contract formation
 - When & where?
 - Defining events & place of business
 - Automated agents
- Incorporation of terms
- Implied terms
 - Mandatory rules & jurisdiction

Requirements of form

- Writing, signatures, originals....
 - Functions?
 - Minimum standards
- Statutory & judicial interpretations
 - Judicial attitudes
- Record-keeping
 - Regulatory & evidential requirements
 - Admissibility & probative value
 - Real, hearsay & best evidence

eSignatures

- Legal or security requirement?
 - Requirements in law
 - Evidencing: (a) identity of signatory; (b) authentication & integrity of document; (c) intention to be bound
- Differential legal treatment
 - 'shall not be denied legal effectiveness' vs 'shall satisfy a legal requirement'
 - Meaningful difference?
 - Contracting out & party autonomy

eSignatures

- Security features
 - Authentication & message integrity
 - person to signature, signature to document
 - The myth of 'non-repudiation'
- Risk identification
 - e.g. tax returns
- From eSignatures to Identity management
 - Who are you dealing with?
 - What are the person's attributes?
 - e.g. age, qualifications, authority
 - Where is the person?

Signature technologies

- Adding information to an electronic document
 - Typed name
 - Scanned image of manuscript signature
- Logically associating information with an electronic document
 - Complex maths & encryption-based
 - Hard to break
 - Associated information can be:
 - Asymmetric encryption key
 - Biometric data

Third party certification

- Self-identification vs trusted third party
 - e.g. notarisation, credit card companies, P2P
- Certification authorities
 - Functions
 - Issue certificates
 - Authentication
 - Provide database
 - Verification & revocation
 - Processes
 - Quality of company, staff & processes

Regulated conduct

- Service providers
 - Right to supply & conditions of supply
 - Domestic & foreign suppliers
- · Licensing, authorisation or accreditation
 - 'qualified'
 - Cost-benefit analysis of non-qualified
 - Meeting the criteria
 - · Periodic audit
- Obligations
 - Liability: negligence-based & evidential burden
 - Permissible limitations: value & duration

Regulator

- Grant of licence, authorisation or accreditation
 - 3rd party auditors
- Maintains registry
 - Liability for breach?
- Standards recognition
 - e.g. CWA 14167-1 (March 2003): security requirements for trustworthy systems managing certificates for electronic signatures
- Cross-border (mutual?) recognition
 - Based on accreditation schemes, rather than individual service providers
- Enforcement
 - Withdrawal of right to supply

Concluding remarks

- EU experience
 - Market demand
 - Impact of regulation
 - Government-led
- Regional concerns
 - Regulatory & user costs
 - Providers