## CONTENTS

For	word to the first edition	V
Ack	knowledgements	vii
Pre	face to the second edition	ix
Tak	ble of UK Cases	xxi
Tal	ble of Overseas Cases	xxiii
Tal	ble of Statutes	XXV
Tal	ble of Statutory Instruments	xxvii
Tal	ble of International Treaties and Materials	xxix
Tal	ble of EU and National Legislation	xxxi
Tal	ble of Foreign Legislation	xxxiii
1.	Introduction and overview	
	Identity and liability	1-004
	Certification authorities and public key infrastructure	1-007
	International context	1-010
	The influence of technology	1-018
2.	Signatures and identities	
	Introduction	2-001
	Legal effects of signatures in the law of contract	2-013
	The English Statute of Frauds 1677	2-014
	Other Statutes of frauds	2-019
	United States of America	2-019
	Other common law jurisdictions	2-021
	Civil law approach	2-022
	What can be a signature at common law?	2–023
	Circumstances where signatures do not bind	2-041
	Signature as a form of identification	2-044
	What is an identity?	2-045
	Private transactions	2-046
	Transactions between individuals and businesses	2-049
	Business-to-business transactions	2-051
	Transactions between individuals and government	2-052
	Electronic identities and tokens	2-056
	International developments	2 - 057
	Porvoo Group	2-062
	Asian IC Card Forum	2-063
	National Initiatives	2-064
3.	Electronic Signature Technologies	
	Introduction	3-001

	"Low tech" solutions	3-006
	Passwords	3-007
*	Bitmaps scan of handwritten signature	3-009
	Light pen	3-010
	Other methods	3-011
	Conclusions	3-012
	Biometrics	3-013
	Retina Scan	3-016
	Iris Scan	3-019
	Face recognition	3-022
	Fingerprints/handprints	3-025
	Hand/finger geometry	3-028
	Handwritten signature dynamics	3-030
	Voice	3-032
	Vein patterns	3-033
	Other proposed forms of biometrics	3-034
	Conclusions on biometrics	3-042
	Encryption	3-044
	The terms for basic cryptography	3-045
	Methods	3-046
	Digital signatures: what they are/how they work	3-050
	Functional equivalence between electronic and handwritten	
	signatures	3-056
	Ceremony: safeguarding against undue haste or	
	thoughtlessness	3-061
	Marking version as the original	3-062
	Non-repudiation	3-063
	1 von repadation	0 000
4.	PKI Structural issues	
	Introduction	4-001
	Establishing identity in cross-border transactions	4-002
11	Roles within PKI	4-013
	Certification practice statements	4-019
	Certificate policies	4-025
	Australia: the Gatekeeper PKI framework	4-026
	Victoria	4-035
9.11	Western Australia	4-036
	Australian Capital Territory	4-037
	The banks—Project Angus	4-038
5.	International initiatives relating to electronic signatures	
	Introduction	5-001
	UNCITRAL model laws	5-002
	Model law on electronic commerce	5-003
	Model law on electronic signatures	5-013
	Trustworthiness	5-027
	Convention on Electronic Contracting	5-030

e-ASEAN reference framework	5-033
MERCOSUR	5-034
ICC general usage for internationally digitally ensured	
commerce (version II)	5-035
OECD ministerial declaration and recommendation on	
authentication for electronic commerce	5-040
EU electronic signatures directive	5-047
6. Electronic signature laws of the world	
Introduction	6-001
1. EUROPE	6-007
(i) Austria	6-008
(ii) Belgium	6-011
(iii) Bulgaria	6-014
(iv) Cyprus	6-019
(v) Czech Republic	6-020
(vi) Denmark	6-023
(vii) Estonia	6-026
(viii) Finland	6-031
(ix) France	6-033
(x) Germany	6-036
(xi) Greece	6-039
(xii) Guernsey	6-041
(xiii) Hungary	6-043
(xiv) Iceland	6-046
(xv) Ireland	6-048
(xvi) Italy	6-051
(xvii) Latvia	6-056
(xviii) Lichtenstein	6-059
(xix) Lithuania	6-060
(xx) Luxembourg	6-063
(xxi) Malta	6-066
(xxii) The Netherlands	6-069
(xxiii) Norway	6-073
(xxiv) Poland	6-074
(xxv) Portugal	6-078
(xxvi) Romania	6-083
(xxvii) Slovakia	6-087
(xxviii) Slovenia	6-090
(xxix) Spain (xxx) Sweden	6-093
(xxx) Sweden (xxxi) Switzerland	6-096
	6-098
(xxxii) United Kingdom  2. ASIA/PACIFIC	6-099
2. ASIA/PACIFIC  (i) Australia	6–103 6–103
Commonwealth legislation	
ETA Variations in each state	6–105 6–109
LIII Valiations in Cach state	ローエリン

(ii) Bangladesh	6-112
(iii) China	6-113
(iv) Hong Kong	6-117
(v) India	6-120
(vi) Indonesia	6-124
(vii) Japan	6-125
(viii) Malaysia	6-127
(ix) New Zealand	6-130
(x) Pakistan	6-134
(xi) Philippines	6-137
(xii) Singapore	6-141
(xiii) South Korea	6-146
(xiv) Sri Lanka	6-148
(xv) Thailand	6-151
(xvi) Vietnam	6-151
3. NORTH AMERICA	6-156
(i) Canada	6-156
Federal law	6-157
Provincial laws	6-160
(ii) Mexico	6-165
(iii) United States of America	6-167
Introduction	6-167
US law on electronic signatures generally	6–168
The Uniform Electronic Transactions Act and	1
the Federal Electronic Signatures in Global and	
National Commerce Act	6-169
Uniform Electronic Transactions Act (UETA)	6-172
Federal Electronic Signatures in Global and	
National Commerce Act (E-Sign)	6–180
Conclusion	6-204
Other governmental regulations concerning electronic	
signatures and records	6-205
4. LATIN AMERICA	6-207
(i) Argentina	6-207
(ii) Brazil	6-210
(iii) Chile	6-211
(iv) Colombia	6-213
(v) Ecuador	6-217
(vi) Panama	6-221
(vi) Peru	6-222
(vii) Venezuela	6-224
5. REST OF THE WORLD	6-226
(i) Russian Federation	6-226
(ii) South Africa	6-228
(iii) Israel	6-230
(iv)Turkey	6-234
(v) United Arab Emirates	6-236

7.	Practical Issues	
	Introduction	7-001
	Cross-border transactions	7-003
	Consequences of contracting cross-border without choice	
	of law and jurisdiction clauses	7-004
	Signature policies and choice of law	7-010
	Transactions with a certification service provider	7-015
	Subscribers	7-018
	Relying parties	7-023
	Relying party agreements	7-025
	Information security	7-028
	Electronic record management	7-034
8.	Evidential issues	
	Introduction	8-001
	Burden and standard of proof	8-003
	Evidential issues in real world transactions	8-005
	(i) Admissibility	8-005
	(ii) Weight	8-009
	"Traditional" signatures as evidence	8-011
	Evidential issues in electronic transactions	8-014
	(i) Admissibility	8-015
	(ii) Weight	8-017
	(iii) Burden of proof	8-019
	(iv) Evidence requirements for repudiation of signatures	8-020
	(v) The position of the relying party	8-027
9.	Regulatory aspects	
	Introduction	9-001
	1. Specific regulation of certification service providers	9-003
	A. EUROPE	9-005
	(i) Austria	9-006
	(ii) Belgium	9-009
	(iii) Bulgaria	9-012
	(iv) Cyprus	9-015
	(v) Czech Republic	9-016
	(vi) Denmark	9-019
	(vii) Estonia	9-021
	(viii) Finland	9-024
	(ix) France	9-026
	(x) Germany	9-027
	(xi) Greece	9-033
	(xii) Hungary	9-035
	(xiii) Iceland	9-038
	(xiv) Ireland	9-039
	(xv) Italy	9-040
	(xvi) Latvia	9-042

	(xvii) Lithuania		9-045
	(xviii) Luxembourg		9-047
	(xix) Malta		9-051
	(xx) The Netherlands		9-052
	(xxi) Norway		9-054
	(xxii) Poland		9-055
	(xxiii) Portugal		9-058
	(xxiv) Romania		9-062
	(xxv) Slovakia		9-065
	(xxvi) Slovenia		9-067
	(xxvii) Spain		9-072
	(xxviii) Sweden		9-074
	(xxix) Switzerland		9-075
	(xxx) United Kingdom		9-077
B.	ASIA/PACIFIC		9-079
	(i) Australia		9-079
	(ii) Bangladesh		9-080
	(iii) China		9-081
	(iv) Hong Kong		9-084
	(v) India		9-087
	(vi) Indonesia		9-089
	(vii) Japan		9-090
	(viii) Malaysia		9-092
	(ix) New Zealand		9-096
	(x) Pakistan		9-097
	(xi) Philippines		9-098
	(xii) Singapore		9-099
	(xiii) South Korea		9-102
	(xiv) Sri Lanka		9-105
	(xv) Thailand		9-106
	(xvi) Vietnam		9-107
C.	NORTH AMERICA		9-109
	(i) Canada		9-109
	(ii) Mexico		9-110
	(iii) United States of America		9-111
D	LATIN AMERICA		9-112
	(i) Argentina		9-112
	(ii) Brazil		9-115
	(iii) Chile		9-116
	(iv) Colombia		9-119
	(v) Ecuador		9-122
	(vi) Peru		9-124
	(vii) Venezuela		9-126
E.	REST OF THE WORLD		9-130
	(i) Russian Federation		9-130
	(ii) South Africa		9-132
	(iii) Israel		9-134

(iv) Turkey	9-137
2. Data protection	9-138
Certification schemes	9-138
Identifying registration schemes	9-139
European data protection law	9-142
The Directive's objects and scope	9-143
The data subject's rights and remedies	9-149
3. Regulation of encryption technologies as dual-use goods	9-151
Military roots of cryptography	9-152
Cybercrime/terrorism	9-153
Export controls on dual-use goods	9-162
(a) At internation level	9-163
(b) European Untion	9-164
(c) National Legislation	9-166
10. Standards	
Overview	10-001
Assessing the security of information technology products	
and systems	10-007
Basic standards relating to public key infrastructure	10-010
Standards for specific technologies	10-014
Standards for the provision of certification services	10-020
Standards relating to information security	10-025
Standards for preservation of evidence	10-029
The effectiveness of the European Standardisation Initiative	10-132
Technical standards and the competition law regime	10-135
Appendices	395
Online sources	620
Glossary	625
Index	629