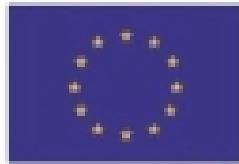


European University Studies



Carolina M. Laborde

Electronic Signatures in International Contracts



PETER LANG

Table of Contents

Abbreviations.....	17
Introduction	19
Part I: Electronic signatures, from technology to law	21
Chapter 1: Signatures	21
A. The electronic environment.....	21
I. Identity of the person	21
II. Integrity of the document.....	23
III. Confidentiality of communications.....	24
B. Electronic signatures.....	25
I. Signatures.....	26
1. Concept of signature	26
2. Functions of signatures	27
3. Terminology.....	30
II. Electronic signature techniques	31
III. Digital signatures	33
1. Cryptography	33
a) Symmetric cryptography.....	34
b) Asymmetric or public key cryptography	35
2. Cryptography applied to digital signatures	36
3. Functioning of digital signatures	38
a) Creation of the digital signature	38
b) Verification of the digital signature	39
4. Public Key Infrastructure	40
5. Strengths and weaknesses of digital signatures	42
C. Conclusions	44
Chapter 2: The legal approach to electronic signatures.....	47
A. The legal question	47
I. The need to regulate.....	47
II. The goal of legal regulation	48
B. The different legal approaches	50
I. The digital signature, mandatory or prescriptive approach	51
II. The minimalist or enabling approach	51
III. The hybrid or two-tier approach	52
C. Technology neutrality in electronic signature statutes	53
D. Conclusions	55

Part II: Electronic signature legislation	57
Chapter 3: The United States of America	57
A. UETA and E-Sign	57
B. Validity of electronic signatures.....	60
I. Recognition of electronic signatures.....	60
II. Concept of electronic signature.....	61
III. Exclusion of electronic signatures	62
1. UETA	63
2. E-Sign.....	63
C. Conclusions	64
Chapter 4: The European Union and Germany	67
A. Electronic Signatures Directive.....	67
I. Concept of electronic signature.....	68
1. Electronic signatures	68
2. Advanced electronic signatures	70
3. Advanced electronic signatures based on qualified certificates created using a secure-signature-creation device.....	70
a) Qualified certificate	70
b) Secure-signature-creation device.....	72
II. Value of electronic signatures.....	73
III. Recognition of foreign electronic signatures	75
IV. Review of the implementation of electronic signatures in the EU	76
V. Writing requirement	76
B. Legal framework of electronic signatures in Germany	78
I. German Digital Signature Act.....	78
II. Transposition of the Electronic Signatures Directive	79
1. Concept of electronic signature	79
2. Legal value of electronic signatures	80
3. Foreign electronic signatures	81
4. Licensing of certification authorities	82
C. Conclusions	82
Chapter 5: Argentina	83
A. Norms before the enactment of the Argentine Digital Signature Act	83
I. Resolution 45/1997 of the Secretary of Public Function.....	83
II. Resolution 293/1997 of the Superintendence of Retirement and Pension Fund Administrators.....	83
III. Executive Order 427/1998	84
IV. Resolution 4536/1999 of the Secretary of Communications	85
V. Executive Order 1023/2001	85

B. Argentine Digital Signature Act.....	86
I. Legislative process of the Argentine Digital Signature Act	86
1. Congressional debate	86
a) House of Representatives.....	86
b) Senate.....	89
2. Promulgation.....	89
II. Scope.....	89
III. Digital signatures	90
1. Concept of digital signature	90
2. Validity requirements.....	92
a) A valid digital certificate	92
b) Created while the digital certificate is in force.....	94
c) Due verification	94
IV. Electronic signatures.....	94
V. Legal value of digital and electronic signatures	95
1. Compliance with the legal requirement of a signature	95
2. Legal presumptions	97
a) Authorship presumption	98
b) Integrity presumption.....	98
c) Sender presumption	98
VI. Digital or electronic document.....	99
VII. Exclusions from the Argentine Digital Signature Act	100
1. Dispositions in case of death.....	101
2. Acts relating to family law.....	102
3. Acts of a personal character.....	102
4. Acts incompatible with the use of digital signatures	102
VIII.Foreign signatures and foreign certificates	103
IX. Public Key Infrastructure	104
1. Application authority	104
2. Licensing entity.....	105
3. Licensed certifiers	105
4. Advisory Commission for Digital Signature Infrastructure	106
C. Conclusions	107
Chapter 6: The work of national and international institutions	109
A. UNCITRAL.....	109
I. UNCITRAL Model Law on Electronic Commerce.....	110
II. UNCITRAL Model Law on Electronic Signatures	114
1. Background	114
2. Goals and principles.....	118
3. Electronic signatures	119
4. Recognition of foreign electronic signatures and foreign certificates	122
5. Effect on national legislation	125

III.	United Nations Convention on the Use of Electronic Communications in International Contracts	125
IV.	Signature requirement in United Nations conventions	128
1.	Convention on the Recognition and Enforcement of Foreign Arbitral Awards.....	128
2.	United Nations Convention on the Carriage of Goods by Sea	128
3.	United Nations Convention on International Bills of Exchange and International Promissory Notes.....	129
4.	United Nations Convention on the Assignment of Receivables in International Trade.....	129
B.	Other organizations.....	129
I.	International Chamber of Commerce.....	129
II.	Internet Law & Policy Forum	130
III.	American Bar Association	131
C.	Conclusions	131

Part III: Electronic signatures and international contracts 133

Chapter 7: General aspects of international contracts..... 134

A.	The international contract.....	134
I.	Concept	134
II.	Elements determining the internationality of a contract	135
1.	Domicile of the parties.....	136
2.	Place of contracting or execution.....	137
3.	Place of performance	137
4.	The economic criterion	137
5.	Nationality of the parties.....	138
6.	Choice of law provision	139
B.	The laws governing substance and form	139
I.	Formal validity	140
II.	The law applicable to the contract	142
C.	Conclusions	146

Chapter 8: The international contract in international legal instruments 147

A.	Convention on the Law Applicable to International Sales of Goods	148
I.	Background	148
II.	International contracts.....	148
III.	Formal validity	149
IV.	Applicable law	149

B. United Nations Convention on Contracts for the International Sale of Goods	150
I. Background	150
II. International contracts.....	152
III. Formal validity	152
IV. Applicable law	153
C. Convention on the Law Applicable to Contractual Obligations.....	156
I. Background	156
II. International contracts.....	157
III. Formal validity	158
IV. Applicable law	159
1. Party autonomy	160
2. Choice of law rules	163
a) General presumption.....	163
i) The characteristic performance.....	164
ii) The habitual residence or central administration.....	165
iii) The time of execution of the contract.....	165
b) Other presumptions.....	166
3. Consumer contracts.....	166
a) Concept of consumer contract	166
b) Article 5.2 consumer contracts	166
c) Freedom of choice	167
d) Absence of choice.....	168
D. Convention on the Law Applicable to Contracts for the International Sale of Goods	168
I. Background	168
II. International contracts.....	168
III. Formal validity	169
IV. Applicable law	169
E. Inter-American Convention on the Law Applicable to International Contracts	170
I. Background	170
II. International contracts.....	170
III. Formal validity	171
IV. Applicable law	171
F. UNIDROIT Principles of International Commercial Contracts	172
I. Background	172
II. International contracts.....	173
III. Formal validity	173
IV. Applicable law	173
G. United Nations Convention on the Use of Electronic Communications in International Contracts.....	175
I. Background	175

II.	International contracts	175
III.	Formal validity	176
IV.	Applicable law	177
H.	Conclusions	178
Chapter 9: The international contract under domestic law		181
A.	Argentine law	181
I.	International contracts	181
II.	Formal validity	184
III.	Applicable law	185
1.	Party autonomy	185
2.	Absence of a choice of law	186
3.	Place of performance	188
4.	Jurisprudence	190
IV.	Contracts between absent and present parties	192
B.	German law	194
I.	International contracts	194
II.	Formal validity	195
III.	Applicable law	198
C.	US law	200
I.	International contracts	200
II.	Formal validity	200
III.	Applicable law	200
D.	Conclusions	202
Chapter 10: The interaction of electronic signature legislation		203
A.	Argentine law governing the form	203
I.	Formal requirements under Argentine law	203
II.	The Argentine Digital Signature Act in international contracts	208
1.	Argentine and US law	208
2.	Argentine and German law	211
III.	The Argentine Digital Signature Act in domestic contracts	213
1.	Digital signatures in the legal sense	213
2.	Digital signatures in the technical sense (electronic signatures) ..	214
3.	Electronic signature	215
B.	German law governing the form	215
I.	Form requirements under German law	215
II.	Written form required by law and the Argentine Digital Signature Act	219
1.	Foreign certification-service-provider accredited in the European Union	220

2. Certification-service-provider domiciled in a EU member state guarantees the certificate.....	221
3. Agreement recognizes the certificate or the certification- service-provider	221
III. Written form not required by law	222
C. US law governing the form	222
I. Statute of Frauds	222
II. Electronic Signatures: Argentina and the United States of America..	223
D. Conclusions	224
Final Conclusions	227
Bibliography.....	231