KLAUS W. GREWLICH Dr.jur.habil. (Freiburg), Dr.sc.econ. (HEC, Lausanne), LL.M. (Berkeley) Professor, College of Europe, Bruges

GOVERNANCE IN "CYBERSPACE" Access and Public Interest in Global Communications



KLUWER LAW INTERNATIONAL THE HAGUE / LONDON / BOSTON

TABLE OF CONTENTS

PREFACE	xiii
ABBREVIATIONS	xvii
Chapter 1	
INTRODUCTION: APPROACH AND WORKPLAN	1
1. Cyberspace	1
2. Globalization: competition in worldwide communications	2 2 6
2.1. Access and public interest	2
2.2. New comparative advantages	6
3. Governance	8
3.1. The notion of governance	8
3.2. Governance – dealing with conflicts	13
3.3. The rule of law	14
4. Workplan	15
PART ONE: THE ADVENT OF "CYBERSPACE"	
Chapter 2	
CYBERSPACE	19
1. Approximations to cyberspace	20
2. The Internet – a paradigm	28
3. The Internet – a phenomenon	33
3.1. A historical review of the Internet	34
3.2. Dynamics of changing infrastructures	35
3.3. The "network of networks"	37
3.4. Economics: Internet pricing structures and settlements	40
3.4.1. Internet pricing structures for end-users	41
3.4.2. Settlements – whose "territory" is cyberspace?	43
3.5. Electronic commerce	46
3.5.1. Electronic commerce on the Internet	47
3.5.2. Definitions – measuring electronic commerce	48

3.5.3. Outlook	50
3.6. Challenges: failures and successes – pricing the Net and	
"in the Net"	50
3.7. Internet governance	53
4. Digitization – multimedia – "deep convergence"	57
4.1. Digitization – Multimedia	58
4.2. Convergence	59
4.3. New multimedia value chain	62
4.4. Platform independence	65
4.5. Alliances	67
4.6. Bundling	68
4.7. Market forces should play	69

PART TWO: "CYBER" POLICIES AND "CYBER" REGULATION

Chapter 3

DEVELOPMENT AND CYBERSPACE: FINANCE	
– "UNIVERSAL ACCESS" – CULTURAL IDENTITY	73
1. Development towards universal access	74
1.1. Overcoming development gaps	75
1.2. Global Information Infrastructure – From Buenos Aires to Valletta	79
1.2.1. Legislative and regulatory reforms	80
1.2.2. Global information infrastructure – Internet	80
1.2.3. Rural development – Internet	81
1.2.4. WTO issues – tariffs, accounting rates	81
1.2.5. Partnership with private sector	81
1.2.6. Human resources development	82
2. Financing communication investment in the new market place	82
2.1. Clarification of terms (Communications market, development,	
infrastructure – bandwidth)	83
2.1.1. The new communication market	83
2.1.2. Development – "a right to communicate"?	83
2.1.3. Infrastructure – bandwidth	86
2.2. Financing requirements and financial markets	87
2.2.1. Response to global connectivity	87
2.2.2. Cash-flow-driven business plans	88
2.2.3. Project finance for cyberspace ventures	89
2.2.4. The art of "syndication"	90
2.3. Experience in multi-jurisdictional environments – optimize	
the Internet business model?	91
Issues to be confronted – Policy considerations – Action	93

.

Chapter 4	
COMPETING "CYBER" POLICIES: US, EU, JAPAN	97
1. Key policy documents on electronic commerce	97
1.1. Previous policy initiatives on global information	
infrastructure (GII) and information society	98
1.1.1. Competition/Rivalry of political visions	99
1.1.2. Co-operation between countries and regions	103
1.2. Strategic commonalties and disparities	105
2. Comparative analysis of US, EU and Japanese policies (electronic	
commerce)	109
2.1. Areas of broad agreement: IPR – telecommunications	109
2.1.1. Principles and common approaches	110
2.1.2. Intellectual Property Rights (IPR)	110
2.1.3. Telecommunication issues	111
2.2. Areas of relative divergence: taxes and duties – standardization	115
2.2.1. Taxes and duties for electronic commerce?	115
2.2.2. Standardization	117
2.3. Areas of potential conflict: content, encryption, data protection	118
2.3.1. Content	118
2.3.2. Encryption	120
2.3.3. Data protection	121
3. Policy considerations, principles for action	122
3.1. Issues to be confronted – general policy principles: open	
markets, co-operation, quality of regulation	122
3.2. Principles for government action	130
3.3. Principles for business action and other stakeholders	131
Chapter 5	
"CYBER" REGULATION: ACCESS – THE EUROPEAN EXAMPLE	133
1. Regulatory challenges	133
1.1. Regulation, deregulation, re-regulation	133
1.2. Areas of de(re-)regulatory action	134
1.3. The quality of regulation	137
1.4. The notion of self-regulation	139
1.5. Reference framework for de(re-)regulation of communications	140
2. Access	142
2.1. From monopolies to full competition – the European example	142
2.2. The significance of access and interconnection	145
2.3. Network effects and network externalities	146
2.4. Essential facilities – Open Network Provision – interconnection	149
2.5. Competition rules/antitrust – access regulation to digital	
"gateways"	155
2.5.1. Competition rules	156
2.5.2. Competition and specific regulation: conditional access	
and content	158

Table of Contents

3. Policy considerations, principles for action	163
3.1. Issues to be confronted	163
3.2. Principles for government action	170
3.3. Principles for business action and other stakeholders	170
Chapter 6	
TRUST: DIGITAL SIGNATURES AND ENCRYPTION	171
1. Technical aspects of trust and security in open networks	172
1.1. Cryptography	172
1.2. Digital signatures	174
1.3. Encryption	177
Legal and regulatory issues – export controls – lawful access	178
2.1. Digital signatures: regulatory issues	178
2.2. Encryption: regulation – export controls – lawful access	179
2.2.1. Confidentiality – public safety/security	180
2.2.2. Export controls	182
2.2.3. Lawful access to encryption keys	186
3. Policy considerations, principles for action	188
3.1. Issues to be confronted	188
3.2. Principles for government action	189
3.3. Principles for business action and other stakeholders	190
Chapter 7	100
INTERNET "DOMAIN NAMES"	193
1. Domain names	194
1.1. The importance of domain names – how the system works	195
1.2. NSI and IANA	198
2. US Proposal for the future organization of the Internet (Green Paper)	200
2.1. Co-ordinated and competitive functions	201
2.2. Trademarks	203
2.3. The transition	204
3. The European approach	205
3.1 Strategy and operational positions	205
3.2. European position concerning the US Green Paper 4. US White Paper	207
*	208 209
 Competition issues pertaining to domain names Self-regulation 	209
7. Policy considerations, principles for action 7.1. Issues to be confronted	211
	212
7.2. Principles for government action	215
7.3. Principles for business action and other stakeholders	215
Chapter 8	
INTELLECTUAL PROPERTY RIGHTS	217
1. Intellectual Property Rights	218

х

,

1.1. History and concepts	219
1.2. Trademarks	223
1.3. Patents	224
1.4. Copyright	226
2. The market in copyright – economics – the case of computer	
software: the right rights balance?	227
3. Social groups	231
4. Copyright rules	232
4.1. Main multilateral agreements	232
4.2. Rights protected – four priority items	234
4.2.1. The right of reproduction – "electronic reproductions"	235
4.2.1.1. "Ephemeral" copies	238
4.2.1.2. Limitations and exceptions: "three-step test"	240
4.2.2. Communication to the public right – "making works	
available"	242
4.2.3. Technical protection systems	246
4.2.4. Distribution right – "exhaustion".	249
4.3. The proposed European approach	251
4.3.1. Proposal on a copyright directive	253
4.3.2. Moral rights	254
4.3.3. Administration of rights	254
4.4. "Fair use" zones in cyberspace – a "WIPO database treaty"?	256
4.5. Closer to the "right rights balance"?	259
5. Policy considerations, principles for action	261
5.1. Issues to be confronted	261
5.2. Principles for government action	265
5.3. Principles for business action and other stakeholders	266
Chapter 9	
FREEDOM OF EXPRESSION AND HUMAN DIGNITY – PRIVACY	267
1. Freedom v. public interest – dignity and privacy	267
1.1. Liberal rights – democracy	269
1.2. Instruments guaranteeing freedom of expression	271
1.3. Freedom of expression v. protection of minors	273
1.3.1. <i>Reno v. ACLU</i>	274
1.3.2. Degrees of liability	275
1.3.3. Regulatory challenges	276
1.4. Privacy and data protection	278
1.4.1. Overview	278
1.4.2. The philosophy of privacy – existing legal instruments	280
1.4.3. The EC Directive on the Protection of Personal Data	283
2. Legislation/regulation and self-regulation	286
2.1. Limited effectiveness of national and international	
legislation/regulation	288
2.1.1. The limits of "balancing"	288

2.1.2. Global networks and local values – information havens	289
2.2. Regulation by co-operative self-regulation	291
2.2.1. Co-operative self-regulation	292
2.2.2. Self-regulation in global networks – the component level	295
2.2.3. Civil liberties and criminal offence – private censorship?	296
3. Policy considerations, principles for action	298
3.1. Issues to be confronted	298
3.2. Principles for government action	299
3.3. Principles for business action and other stakeholders	300

PART THREE: GOVERNANCE IN "CYBERSPACE"

Chapter 10

GOVERNANCE: STAKEHOLDERS, JURISDICTION, PRINCIPLES -	
IMPLEMENTATION	305
1. The rule of law in cyberspace: stakeholders, jurisdiction, principles	307
1.1. Structural change of international law – new stakeholders	312
1.2. More about new stakeholders	314
1.3. Jurisdiction	319
1.4. Principles resulting from self-regulation	323
1.5. Method for identifying relevant principles	326
1.6. General principles: proportionality, subsidiarity	329
1.7. Specific substantive principles	333
2. Implementation	335
2.1. Instruments	336
2.2 Outlook	341
BIBLIOGRAPHY	345
GLOSSARY	377
INDEX	399

.