

TABLE OF CONTENTS

Preface	V
Summary of contents	VII
Part I Preliminaries – Aernout Schmidt	1
1. Peer-to-Peer Problems	3
2. The World According to Lessig	5
3. Cultural and Institutional Theories	6
4. The Morality of Regulation by Architecture	8
5. Structure	8
Part II The Morality of Regulation by Architecture – Aernout Schmidt	11
1. IT as a Relevant Discipline	13
2. Asking a Question	15
2.1 Roles in IT practice	16
2.2 The story	17
2.3 Booting	18
2.3.1 Some history: Moore's law, law, standards	19
2.3.2 The operating system	22
2.3.3 Handles for regulation during boot	24
2.4 The desktop	25
2.4.1 As a part to the operating system: policies	26
2.4.2 As a port to applications: stand-alone, client-server, peer-to-peer	26
2.5 Two application semantics, four efficiencies (intermezzo)	27
2.5.1 The reference approach	28
2.5.2 The convention approach	30
2.5.3 Application characteristics by convention	31
2.6 Asking a question (summing up)	34
3. Regulation by Design and Deployment	35
3.1 Application design methodology	35
3.1.1 The ITdesign framework Sections	37
3.1.2 The ITdesign framework Chapters	37
3.1.3 Remodelling Napster	38
3.2 Regulation by design and deployment (summing up)	48
4. The Morality of Regulation by Architecture	48
4.1 Eight conditions	49
4.1.1 Moral challenges for regulation by architecture	52

4.2	Five questions	53
4.2.1	Is regulation by architecture a one-way projection of authority?	53
4.2.2	Who can make legitimate regulation by architecture?	54
4.2.3	What are the institutional roles?	55
4.2.4	What are the role moralities involved?	56
4.2.5	How is interaction placed in regulation by architecture and its administration?	56
4.2.6	Basic assumptions on the morality of regulators by architecture	57
4.3	The morality of regulation by architecture	57
4.3.1	Morality of duty (M1)	58
4.3.2	Morality of aspiration (M2)	62
Part III	The Economics of P2P in Music – <i>Wilfred Dolfsma</i>	63
1.	Introduction	65
2.	Markets for Information Goods	67
3.	Some Economics of Intellectual Property Rights	71
3.1	The music industry: digitisation	72
4.	Market Standards, Business Models and Future Music	77
5.	Three Models Assessed	85
6.	Products & Prices: Welfare Implications	88
7.	Conclusions	92
Part IV	Intellectual Property Rights for Music File Sharing – <i>Wim Keuvelaar</i>	93
	Preface	95
1.	Approach	95
1.1	Copyright, neighbouring rights and file sharing	95
1.2	Problem definition	96
1.3	Context	97
1.4	Restrictions to the research project	98
1.5	Research goal	98
1.6	Plan of work	98
2.	The WIPO Treaties	99
2.1	Introduction	99
2.2	Exploitation rights	99
2.2.1	The right of reproduction	99
2.2.2	The right of distribution	100
2.2.3	The right of rental	100
2.2.4	The right of communication and making available to the public	101
2.3	Limitations	102
2.4	Exercise and enforcement	102
2.5	Technical protection measures	102

3.	The Application of Copyright and Neighbouring Rights	103
3.1	Introduction	103
3.2	The right of reproduction	103
3.3	The right of distribution	105
3.4	The right of rental	106
3.5	The right of communication and making available to the public	106
3.6	New questions and problems	107
4.	The Application of the Restriction of Private Copying	108
4.1	Introduction	108
4.2	Private copying in Directive 2001/29/EC	108
4.3	Private copying according to current law	109
4.4	Private copying according to future law	110
4.5	New questions and problems	111
4.5.1	The non-commercial criterion	111
4.5.2	A home copying levy on other equipment	112
4.5.3	Determining the amounts of fair contribution and retribution	112
4.5.4	The need for collective administration	113
5.	The Exercise of Copyright and Neighbouring Rights	113
5.1	Introduction	113
5.2	Individual or collective	113
5.3	Exercising musical copyright	114
5.4	Exercising neighbouring rights with respect to music	115
5.5	New questions and problems	116
5.5.1	Legitimacy of collective administration organizations	116
5.5.2	Increasing importance of competition law	117
5.5.3	Territorial boundaries and (national) collective administration	117
6.	The Enforcement of Copyright and Related Rights	118
6.1	Introduction	118
6.2	Civil law enforcement	118
6.3	Penal law enforcement	118
6.4	Directive on measures and procedures to ensure enforcement	119
6.5	Liability of software providers	120
6.5.1	Napster	120
6.5.2	Grokster and Streamcast	121
6.5.3	KaZaA	123
6.6	New questions and problems	124
6.6.1	Mass infringement and privacy	124
6.6.2	Careful behaviour of software providers	125
7.	Digital Rights Management	126
7.1	Introduction	126
7.2	The legal framework for digital rights management	126
7.3	New questions and problems	128

7.3.1	Position of ‘open information’ initiatives	128
7.3.2	Accountability, individual normative choice	128
8.	Summary	129
9.	Postscript	129
Part V	Understanding the War – <i>Aernout Schmidt</i>	133
1.	Introduction	135
1.1	Mainstream IT, economic and legal analyses	136
1.1.1	IT	136
1.1.2	Economics	137
1.1.3	The law	141
1.1.4	Preliminary conclusions	145
2.	Framing for Multidisciplinary Analysis	146
2.1	War	148
2.1.1	War and peace as a multilevel affair	150
2.2	Danger and dirt	151
2.3	Cultures	152
2.4	Monsters	153
2.5	Organizations	155
2.6	Domain and jurisdiction – organizations as normative systems	156
2.6.1	Intermezzo: an interpretation of law-system morality	159
2.7	Externalities	161
2.8	Markets	162
2.9	Institutions	163
2.10	Multidisciplinary institutional analysis	166
3.	Institutional Analysis of the War on Music-file Sharing	168
3.1	Regularities in social behaviour	169
3.1.1	The music industry	169
3.1.2	Sharers	169
3.1.3	Providers	169
3.1.4	Courts	170
3.1.5	Two questions	170
3.2	Institutional analysis	171
3.2.1	Collective interests	171
3.2.2	Domains	172
3.2.3	Markets	173
3.2.4	Rule-sets	174
3.2.5	Policies	176
3.2.6	Norm-sets	178
3.2.7	Organizations	179
3.2.8	Individuals	182
3.2.9	(Market) feedback mechanisms	184

3.2.10	Belief-sets	187
3.3	The war path	188
4.	Recommendations and Conclusions	190
4.1	Institutional understanding	190
4.1.1	Monster, monster domains, monster markets	190
4.1.2	Monster-managements strategies	193
4.2	Institutional interpretation	194
4.2.1	The battles over hacked containers: piracy and private use	195
4.2.2	The battle over unprotected containers: sharing	197
4.3	Recommendations	202
4.4	Conclusions	202
4.5	Afterthought	204
References		205
About the authors		213