Preface	9		XV
Forewa	ırd	CO,	xvii
List of	Abbre	viations Nautrality Masta Compatition 20	xix
Снарте	r 1	NSV	
Introdu			1
§1.01		Neutrality Meets Competition Law	1
§1.02		Theme of This Book	4
§1.03		olution in Search of a Problem?	5
§1.04	Meth	nodology and Approach	7
§1.05	Non	-technical, Technical Background	8
	[A]	The Internet and Its Main Players	8
	[B]	The Architecture of the Internet and the "Stupid Network"	10
	[C]	Interconnection	12
	[D]	Quality-Differentiation Techniques	15
Снарте	r 2		
Net Ne	utralit	y: Definition, Principles and Objectives	19
§2.01	Intro	oduction	19
§2.02	The Various Definitions of NN		
	[A]	No Blocking	20
	[B]	No Discrimination in Favour of Vertically Integrated Content	
		Services	20
	[C]	Maintaining the "Zero-Price Rule"	21
	[D]	No "Undue Discrimination" and "Reasonable	
		Traffic Management"	24
		[1] Network Security and End-User Controlled Restrictions	25
		[2] Congestion	25

		[3]	The 2014 FCC Proposals and "Commercial	
		. ,	Unreasonableness"	27
	[E]	Acce	ss and Consumer Tiering	27
	[F]		lled Gardens" and "Granny Packages"	29
	[G]		naged" or "Specialized" Services: An Exception?	29
	[H]		mum QoS Requirements for IASs	31
§2.03	Look	ing fro	om Another Angle: NN as an Interconnection Issue	32
§2.04	Broa	der De	efinitions of NN	33
	[A]	Open	n Access	33
	[B]	Neut	rality across All Levels	34
	[C]	Devi	ce Neutrality	34
	[D]	NN a	and the Regime for the Liability of Online Intermediaries	34
§2.05	The	Argum	nents of the NN Debate	35
	[A]	Cent	ral Economic Concepts	35
		[1]	Network Effects	35
		[2]	Two-Sided Markets	37
		[3]	Two-Sided Markets Price Discrimination	39
	[B]	Excl	ısion, Exploitation and Market Power	42
		[1]	The IAP Has Market Power in the Retail Market for IASs	42
		[2]	The IAP Faces Competition in the Retail Market for IAS	44
	[C]	Welf	are Effects	45
		[1]	Effects on Static Efficiency	45
			[a] Maintaining the Zero-Price Rule"	45
			[b] Prohibiting Access-Tiering	46
		[2]	Effects on Dynamic Efficiency	47
			[a] Innovation at the Content Level	47
			[i] By Independent CPs or "The	
			Man in the Garage"	47
			[ii] By the Network Operators	48
			[b] Innovation at the Infrastructure Level	49
	[D]		End-to-End Principle	50
	[E]	•	nd Competition and Innovation	51
		[1]	Common Infrastructure Theories	51
			Freedom of Expression and Pluralism	52
		[3]	Participation and User-Generated Content	52
	[F]		gestion	53
			Congestion Pricing	53
		[2]	Capacity Expansion	55
	[G]		ity Degradation and the Internet "Dirt Road"	55
§2.06	Cond	clusion	IS .	56
CHAPTER Not No.		v D	ulation in the EII	
§3.01		y Kegi ductio	ulation in the EU	57 57
30.01	11111	uucuu	/±±	51

§3.02	The EU Regulatory Framework: A Short Overview	58			
33.02	[A] General Provisions: Scope	58			
	[B] Separation of Transmission and Content	59			
	[1] The History of the Distinction	60			
	[2] Implementation of the Distinction	61			
	[3] Interactions within the Framework	66			
	[4] Classification of Services That Are of Relevance	00			
	to the NN Debate	67			
	[C] The Objectives of the NRAs	68			
	[D] The General Authorization Regime	69			
	[E] Imposition of Obligations on Operators with Significant				
	Market Power (SMP): The Article 7 Procedure	70			
	[1] Relevant Market Definition	70			
	[2] Market Review and Imposition of Remedies	72			
		73			
	[3] Procedure for EU Consultation [F] Interconnection [G] Full Harmonization? [H] Dispute Resolution [I] Transparency [J] Minimum QoS [K] Switching [L] Blocking of Illegal Content	73			
	[G] Full Harmonization?	74			
	[H] Dispute Resolution	78			
	[I] Transparency	78			
	[J] Minimum QoS	78			
	[K] Switching	79			
	[L] Blocking of Illegal Content	79			
§3.03	The Background of the Review of the EU Regulatory	17			
\$3.03	Framework with Respect to NN	83			
§3.04	Subsequent Developments	85			
\$3.04	[A] EU Institutions	85			
	[1] Commission	85			
	[2] Council	86			
	[3] Parliament	87			
	[B] BEREC	87			
	[C] Action by Some Member States	91			
	[1] France	91			
	[2] UK	92			
	[3] Other Member States	94			
	[D] The Connected Continent Regulation	94			
§3.05	The Role of Competition Law within the EU Regulatory	74			
83.03		106			
§3.06	Regime for NN Conclusions	111			
83.00	Conclusions	111			
Снартея					
	nerent Potential and Limitations of Competition Law in				
	ing Net Neutrality	113 113			
§4.01	Introduction				

§4.02	The (Objectives of EU Competition Law <i>versus</i> the Objectives			
	of NN: "Openess"				
	[A]	The Objectives of EU Competition Law	114		
		[1] The Various Aims of the Rules on Competition	114		
		[a] Protecting Competition, Competitors and/or			
		Consumers?	114		
		[b] Consumer or Total Welfare?	115		
		[c] The Underlying Values of the Rules on Competition	118		
		[2] Exclusionary Abuses	119		
		[3] Exploitative Abuses	121		
	[B]	EU Competition Law	122		
		[1] The Evolution of the Objectives of EU Competition Law	122		
		[2] Per Se Restrictions and Effects Analysis: A Primer	128		
		[3] Synthesis: The Applicable Standard for Abuses under EU			
		Competition Law	131		
		[a] Tentative Conclusions on the Current			
		State of the Law	131		
		[b] Assessment	132		
	[C]	Comparison with the General Objectives of NN	136		
§4.03	The Objectives of Competition Law versus the Specific				
	Obje	ctives of NN: Pluralism	137		
	[A]	A Primer on Pluralism	138		
	[B]	NN and Pluralism	141		
	[C]	Competition Law and Pluralism	142		
		[1] Pluralism as a Public Policy Objective	142		
		[2] Diversity as a Hallmark of Consumer Welfare	146		
§4.04		Objectives of Competition Law versus the Objectives of NN:			
		vation	151		
	[A]	EU Competition Law and Innovation	151		
		[1] Case Law with Implications for Dynamic Competition			
		and the 2008 Guidance	151		
		[2] Incorporation of Innovation Considerations	152		
		[a] Objective Justifications	152		
		[b] Burden of Proof of Dynamic Efficiencies	153		
	[B]	A Tentative Reading of the Case Law and Its			
	- 1	Relevance for NN	155		
§4.05		r Inherent Limitations of EU Competition Rules in			
24.26	_	guarding NN	156		
§4.06	Conc	lusions	157		
CHAPTER					
		ket Definition and Assessment of Market Power	159		
§5.01	Intro	duction	159		

§5.02	_	e Background; Primers on Market Definition	
	and Marke		160
		vant Market Definition	160
SE 02		essment of Market Power; Dominance	162
§5.03		ets for Content Termination	163
		oductory Remarks Termination	163 164
		tent Termination	168
	[C] Cont	Direct Constraints	168
	[2]	Indirect Constraints	170
	[2]	[a] Ability to Switch; Availability of Alternatives	170
		[b] Switching Costs	172
		[c] Incentive to Switch: Reaction to Restrictive	172
		Practices by IAPs	174
		[d] Switching Inertia: On the Role of Transparency	174
		[i] Consumer Sovereignty and	170
		Behavioural Theories	176
		[ii] Behavioural Theories and Regulation	170
	[3]	Countervailing Power	182
		clusions and Extensions	183
§5.04	. ,	Markets for Internet Access Services	183
§5.05		ets for Interconnection	185
§5.06		ets for Interconnection to an IAP's Network	189
§5.07		Dominance	192
§5.08		Markets at the Content Level	195
§5.09	Conclusion		197
50101			
Снартег	6		
Net Net	ıtrality Viol	lations as Refusals to Deal	199
§6.01	Introduction	on	199
§6.02	Practices 1	nder Examination	200
§6.03	EU Case L	aw on Refusals to Deal	201
	[A] The	World without Microsoft I	201
	[1]	The Case Law of the CoJ	201
	[2]	Summary	208
	[3]	The Commission's Practice	209
	[4]	Summary	215
	[B] Micr	rosoft I	218
	[1]	The Commission's Decision and the Judgment of	
		the General Court	218
	[2]	Summary	223
		Commission's 2008 Guidance	225
§6.04		ative Approach to Refusals to Deal	226
	[A] Intro	nductory Remarks	226

	[B]	Indispensability	227
	[C]	Restriction of Effective Competition	232
	[D]	Restriction of Effective Competition Is Such as to Harm	
		Consumers	233
		[1] The Tension between the Different Efficiencies	
		Resulting from a Refusal to Deal	236
		[2] Solving the Tension	240
§6.05		ations of NN as Refusals to Deal	251
	[A]	Blocking	251
		[1] Indispensability	251
		[a] Market Power in Content Termination Markets	251
		[b] Market Power at the Retail Internet Access Level	253
	[17]	[2] Restriction of Competition and Consumer Harm	254
	[B]	Refusal to Interconnect	256
	[C]	Refusal to Provide Premium Services	257
	[D]	Refusal to Include in a "Granny Package" or "Walled Garden"	257 258
	[E]	Objective Justifications [1] Congestion Control	258
		[2] Other Justifications	260
§6.06	Con	clusions	261
80.00	Com	[2] Other Justifications clusions	201
Снартеі	R 7	-014	
		ry, Discrimination and Unfair Pricing	263
§7.01		oduction	263
§7.02		rimination	266
_	[A]	EU Case Law on Article 102(c)	266
		[1] Overview of the Case Law	266
		[a] Shortage of Supplies	266
		[i] BP	266
		[ii] BPB Industries	267
		Discounts and Rebates	268
		[i] Hoffmann-La Roche	268
		[ii] Michelin I	269
		[iii] AKZO	269
		[iv] Soda-ash/Solvay	270
		[v] Irish Sugar	270
		[vi] British Airways	272
		[c] Violations of the Internal Market Principle	273
		[i] United Brands	273
		[ii] Tetra Pak II	274
		[iii] Corsica Ferries	274
		[iv] Portuguese Airports	274
		[v] Deutsche Bahn	275
		[d] Miscellaneous	275

		[i] Deu	itsche Post	275
		[ii] Clea	ırstream	276
		[iii] Kan	nal 5	277
		[iv] Pos	t Denmark	277
		[2] Assessment		279
		[a] Harm to 0	Competitors versus Harm to Effective	
		Competiti	on and Consumers	279
		[b] Efficienci		281
		•	lective Justifications	283
		=	Discrimination against Downstream	
		-	elationship with Article 102(b)	284
	[B]	NN Violations as Abu		285
		[1] Price Discrimin		285
			Menus of QoS	285
			Different Prices for the Same Level of QoS	287
		[2] Quality Discrim		287
		[3] Objective Justif	ication	289
§7.03		sive Pricing	.	290
	[A]	The Case Law on Exc	essive Pricing	290
	[B]	Implications for NN	4.5	294
§7.04		ces Implemented on t	he Consumer Side	295
§7.05	Conc	usions		296
Снартег	. 0		200	
		l Conclusions	13	299
§8.01	Exte	A Committee of the Comm	7	299
30.01	[A]	The EU Google Invest	tigation	300
	[B]		of Online Competition	302
	[D]	[1] Non-price Com	_	302
		A 7	lures and Behavioural Biases	305
			s, Economies of Scale and	303
		Two-Sided Mar		305
		[4] Innovation	Nets	306
		[5] Proof of Discrin	nination	307
§8.02	Final	Remarks	initation	307
30.02	1 11101	atemarko		501
Bibliogf	RAPHY A	ND TABLES OF CASES AN	d Material	
Bibliog	raphy			309
Decisio	ns of t	e European Commis	sion under the Competition Rules	349
Judgme	ents of	he Court of Justice o	f the European Union	355
Judgme	ents of	he General Court		361

Opinions of Advocates General	363
Comment Letters and Decisions of the European Commission under Article 7 of the Framework Directive	365
EU Legislation	367
Notices, Recommendations, Communications, Guidance, Guidelines, White Papers, Reports and Staff Working Documents of the European Commission	369
Declarations and Reports by EU Institutions	375
Decisions, Declarations, Reports by BEREC and National Authorities	377
National Case Law	383
Speeches/Statements	385
Index Acoustic Acoust	387
Decisions, Declarations, Reports by BEREC and National Authorities National Case Law Speeches/Statements Index	