

Table of Contents

About the Author	v
Preface	xiii
Acknowledgements	xvii
List of Abbreviations	xix
Introduction	1
PART I	
The Policy Framework and Design of an Integrated Framework for Offshore Wind and Grid Interconnections	5
CHAPTER 1	
Introduction	7
§1.01 Problem Statement, and Aims of This Book	7
[A] Problem Statement and Research Questions	7
[1] Part I: The EU Policy Framework and the Design of an Integrated Framework	7
[2] Part II: The Legal Framework and the Legal Barriers to Achieve an Integrated Legal Framework	9
[B] Aim and Research Subject	10
[1] The Principles of Conferral, Subsidiarity and Proportionality	10
[2] Coherence and Consistency	13
[3] The Integration Principle	16
[C] Scope	19
[1] The Role of Technology	22
[2] Economic Issues and Network Charges	26

Table of Contents

	[3]	Competition for Sea Space	29
	[4]	Market Context	33
§1.02		Theory and Methods	36
	[A]	A Theoretical, Normative and Pragmatic Approach to Legal Theory	36
	[B]	Methods	38
	[1]	Legal Method and Systematic and Comparative Approach	38
	[2]	Relying on Other Disciplines	39
CHAPTER 2			
		The Policy Framework for Offshore Wind and Grid Interconnections	41
§2.01		Introduction	41
§2.02		The EU's Policy Framework for Offshore Wind and Grid Interconnections	42
	[A]	The Energy and Climate Change Policies	42
	[1]	The Late Development of the EU's Energy Policy	42
	[2]	Offshore Wind on a Cusp between Energy and Climate Action	48
	[B]	The Planning of Offshore Wind and Submarine Cables in the Marine Environment and Its Ecosystems	54
	[1]	The Environmental Policy Area and Its Application to the Marine Environment	54
	[2]	Maintaining a High Level of Protection and the Ecosystem-Based Approach	57
	[C]	Electricity from Offshore Wind Farms	62
	[1]	Electricity Generation and the Internal Market Policy	62
	[2]	Electricity Transmission and the Trans-European Networks Policy	65
§2.03		The Integrated Maritime Policy: Towards a New Way of EU Policy Making	68
	[A]	Moving Away from Fragmentation	68
	[B]	Achieving Integration	71
	[C]	The Application of Maritime Spatial Planning	74
§2.04		Conclusion: A Fragmented Policy Framework	77
CHAPTER 3			
		Designing an Integrated Framework for Offshore Wind and Grid Interconnections	81
§3.01		Introduction	81
§3.02		Towards an Offshore Integrated Framework in the EU	82
	[A]	Defining an Integrated Framework for Offshore Wind in the EU	82
	[B]	Approaches to Managing Sea Space	84
	[1]	Traditional Approaches to Managing Sea Space	84
	[2]	Modern Approaches to Managing Sea Space	86

Table of Contents

§3.03	Examples of Achieving Integration within Existing Policy Frameworks	89
[A]	Integrating Different Policies within the EU: The Integrated Maritime Policy	89
[1]	Sectoral and Cross-Sectoral Policy Objectives	89
[2]	Governance at a Certain Scale	92
[3]	Implementation Tools and Measures	95
[4]	International Cooperation	97
[B]	Ocean Management Approaches in Australia and New Zealand	98
[1]	Introducing the Context in Australia and New Zealand	98
[2]	Ecosystem-Based Management Approach and Integrated Management Approach	103
[3]	Adaptive Management Approach and Constituency Building	107
[C]	Lessons Learned for Future EU Approaches	111
§3.04	Conclusion: Setting the Criteria for an Integrated Framework	115
PART II		
Towards an Integrated Legal Framework for Offshore Wind and Grid Interconnections		119
CHAPTER 4		
The Current Legal Framework for Planning, Permitting and Licensing		121
§4.01	Introduction	121
§4.02	Different Legal Levels and Economic Sectors	125
[A]	Planning the Location of the Offshore Wind Farms and Grid Interconnections	126
[1]	Rules Guiding the Location across Legal Levels	126
[a]	Maritime Zones in the United Nations Convention on the Law of the Sea	126
[b]	Marine Regions and Sub-regions in the Regional Sea Conventions	131
[c]	Marine and Coastal Waters in EU Law	132
[2]	Rules Guiding the Location across Economic Sectors	135
[a]	Oil and Gas Extraction Sites and Infrastructures	137
[b]	Maritime Transport Routes	139
[c]	Submarine Cable and Pipeline Routes	143
[d]	Fishing Areas	145
[3]	The Role of the Different Legal and Sectoral Rules Decisive for Location	149
[a]	The Role of the Proposal for an MSP Directive	149
[i]	Integration of the Land-Sea Interface	150
[ii]	Integration of Sectoral Interests	152
[iii]	Integration of the Different Legal Levels	160
[b]	The Role of the Adopted MSP Directive	165

Table of Contents

	[c]	The Role of the MSFD	168
[B]		Assessing the Environmental Impacts of the Chosen Locations	174
	[1]	Environmental Impact Assessments and Strategic Environmental Assessments	174
	[2]	Appropriate Assessments and Special Protected Areas	178
	[a]	The Habitats and Birds Directives and the Appropriate Assessments	179
	[b]	Marine Protected Areas and Particularly Sensitive Areas	184
	[3]	Co-existence of the Different Environmental Assessments and Protected Areas	189
[C]		Authorization Procedures for Offshore Installations and Submarine Cables	194
	[1]	Rules on Administrative Procedures Affecting the Authorization Decision	195
	[a]	Rules Related to Authorizing Offshore Wind Farms and Grid Interconnections	195
		[i] The RES Directive	195
		[ii] The Regulation on Guidelines for TEN-E	197
	[b]	Rules Related to Authorizing Grid Access and Connection	199
	[2]	Weighing the Objectives Reflected in the EU Secondary Legislation	201
	[a]	The Environment and Combating Climate Change	202
	[b]	Achieving a Competitive and Secure Internal Energy Market	204
	[c]	Promoting Grid Interconnections and Trans-European Energy Networks	207
§4.03		Conclusion: A Horizontally and Vertically Fragmented Legal Framework	209
CHAPTER 5			
		Legal Barriers for Planning, Permitting and Licensing	217
§5.01		Introduction	217
§5.02		Barriers in the North Sea and the Baltic Sea	218
	[A]	Introduction to the Case Studies of Kriegers Flak and COBRACable	218
	[B]	Barriers in Relation to the Spatial Dimension	221
	[1]	The Connection between Technology, Space and Scale	221
	[2]	The Problem of a Relevant Scale	227
	[C]	Barriers in Relation to the Economic Dimension	229

Table of Contents

[D]	Barriers in Relation to the Conflict Dimension	234
[1]	Offshore Wind and Grid Interconnections Vis-à-Vis Other Users	234
[2]	Offshore Wind and Grid Interconnections Vis-à-Vis the Environment	237
[3]	Economic Users Vis-à-Vis Environmental Users	242
§5.03	Conclusion: Barriers Related to Spatial, Economic and User Conflict Dimensions	244
CHAPTER 6		
	Achieving an Integrated Legal Framework for Planning, Permitting and Licensing	247
§6.01	Introduction	247
§6.02	The Policy Objectives Underpinning the Legal Framework	248
[A]	Objectives Related to the Spatial and Cost Dimensions	249
[B]	Objectives Related to the User Conflict Dimension	253
§6.03	Integrating the Necessary Tools	256
[A]	Towards Integrating Sectoral Interests	257
[B]	Towards Integrated Coastal Zone Management (ICZM)	261
[C]	Towards Integrating Environmental Protection and Marine Protected Areas	266
[D]	Towards Integrating the Economic and Environmental Pillar of the IMP	271
[E]	Towards Regionalization and International Cooperation	273
§6.04	Rational Use of the Marine Waters in the EU	281
§6.05	Conclusion: Remedies to Overcome the Identified Barriers	282
CHAPTER 7		
	Conclusion	287
	Bibliography	299
	Index	319

<http://www.pbookshop.com>