

**Dariusz Szostek**

# Blockchain and the Law



Nomos

# Inhaltsverzeichnis

Introduction	9
Chapter I. Blockchains and DLT in the digital economy	11
Introduction	11
Blockchains – a new digital economy?	17
Introduction	17
Trends of the digital economy	20
DLT and blockchains as a catalyst for lex electronica?	25
Chapter II. Blockchains, DLT – basic terms.	34
DLT –distributed ledgers	34
Definition	34
Legal definition	36
DLT and documents	37
Blockchains	40
Definition	40
Legal definition	42
Blocks	45
Consensus	47
How does it work?	49
Types of blockchains	52
Chapter III. Blockchains in finance	54
Introduction	54
Blockchains in financial institutions	56
Bitcoin and its Bitcoin blockchain	58
Bitcoin – how does its blockchain work?	59
Bitcoin blockchains – legal issues	63
Introduction	63
License for Bitcoin software	64

	Other contracts within the Bitcoin blockchain	71
	Relationships among "miners"	72
	Mining contracts	80
	Relationships among Bitcoin holders	82
	Wallets	82
	Transfers of bitcoins or other cryptocurrencies and blockchain records	85
	Cryptocurrency "exchanges" and buyers	88
	Blockchains or DLT and electronic money	92
Chapter IV.	Durable media with blockchain technology	97
	Introduction	97
	Term of durable medium	97
	Blockchain technology and durable media	102
	Private or public blockchain as technology for durable media?	104
	Use of private blockchains as technology for durable media	104
	Use of public blockchains as technology for durable media	105
	Ways of recording documents on durable media	106
	"Forgetting" a document on a durable medium	108
	"Providing" a document on a blockchain-based durable medium.	108
Chapter V.	"Smart Contracts"	110
	Introduction	110
	Definition of a Smart Contract	112
	From the point of view of the doctrine	112
	Legal point of view	115
	The Notion, Properties and Classification of "Smart Contracts"	116
	Notion and properties	116
	Classification	119

Tokens in "smart contracts"!	123
Introduction	123
Definition	125
Tokens – legal issue	127
"Smart contracts" as private law	131
"Smart contracts" and lawyers	131
Custom, common law, <i>lex mercatoria</i> , arbitration and smart contracts	133
Chapter VI. The future of blockchain solutions in legal regulations (an initiated discussion).	136
Appendix	141
Bibliography	153
The Author	159