

The Liechtenstein Blockchain-Act

Dr. Thomas Dünser

Government of Liechtenstein

12.03.2019





Bitcoin, Blockchain and Token Economy?

- 2008: Whitepaper of Bitcoin
- 2016: First ICO in Liechtenstein (Aeternity)
- «With Blockchain, no Banks are needed»
- 11/2016: «Blockchain Working Group» Liechtenstein
- 08/2018: Public Consultation of Blockchain Act
- 2019: Parliament Discussion and Entry into Force

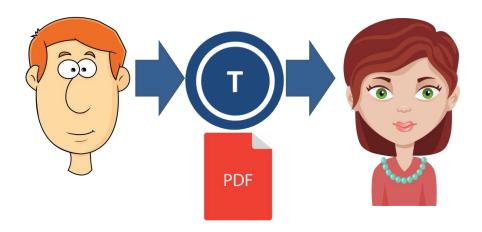


What is the use of Blockchain?

Digital Information is copyable

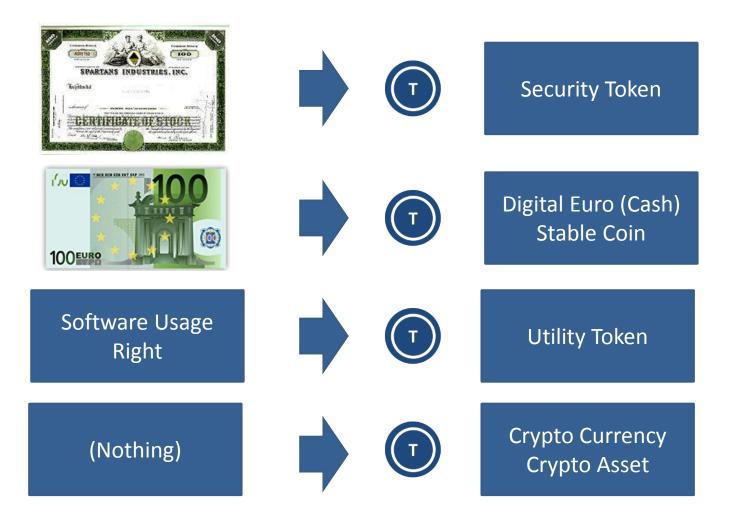


Blockchain creates Digital Original Document



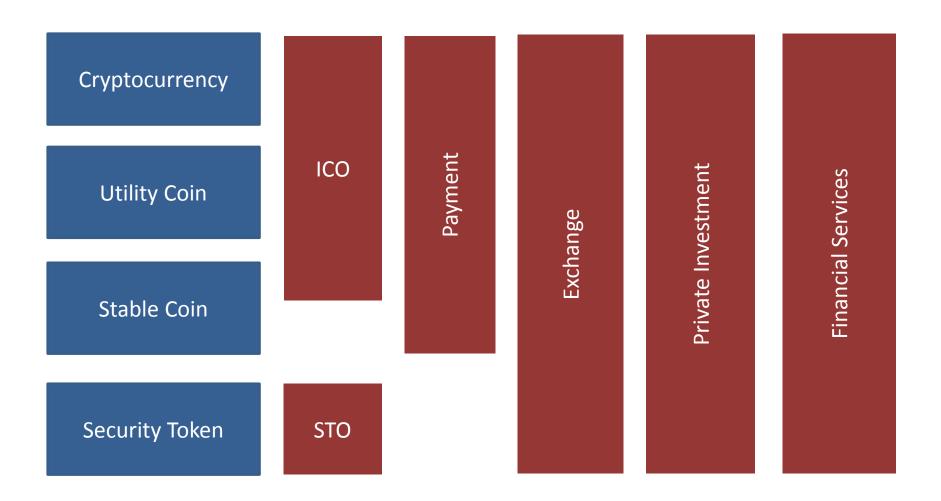


Current Token Use



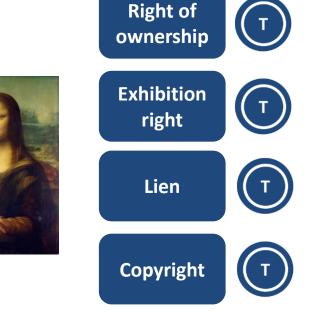


Current Applications of Token





Use Case: Tokenization of Art / Physical Items







Use Case: Real Estate



Owner Rights



Usage Rights



Lien





Proof of Ownership

Mortgage

Rental

Guarantee

Access Rights



Use Case: Car



Right of ownership



Usage Right



Lien





Leasing

Car Sharing

Car Rental

Insurance

Car Investments

Theft Control

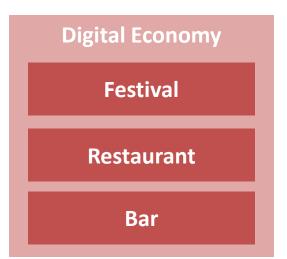


Use Case: Beer Voucher



Right to get Beer





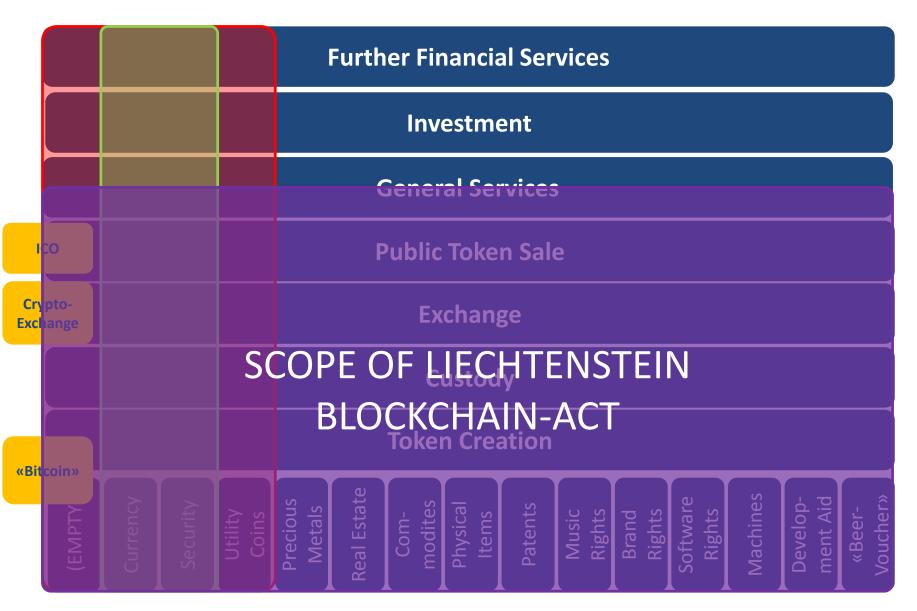


Functional Overview of Token Economy

	Further Financial Services													
	Investment													
	General Services													
ICO	Public Token Sale													
Crypto- Exchange	Exchange													
	Custody													
«Bitcoin»				Token Creation										
(EMPTY	Currency	Security	Utility Coins	Precious Metals	Real Estate	Com- modites	Physical Items	Patents	Music Rights	Brand Rights	Software Rights	Machines	Develop- ment Aid	«Beer- Voucher»



Scope of Liechtenstein Blockchain Act





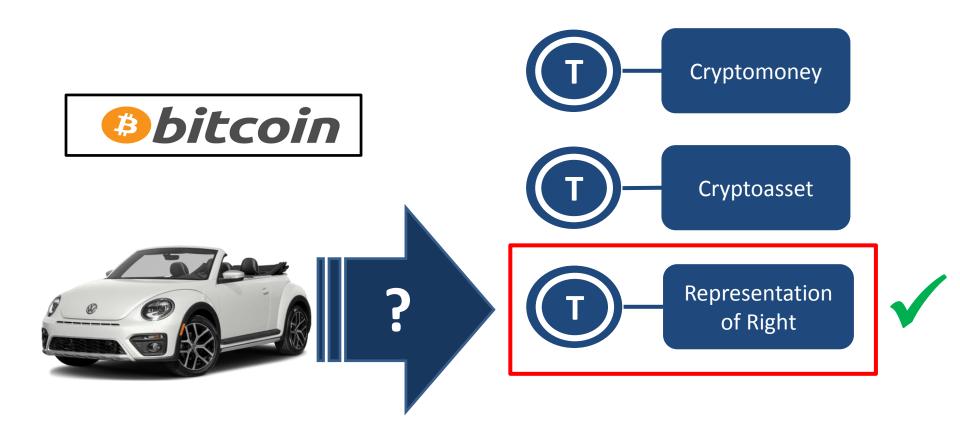
Fundamental Questions of Token Economy



- What is a «Token»?
- Can you own a «Token»?
- Is there a difference between «Ownership» and «Possession»?
- Can a «Token» be stolen?
- Legal aspects of «Token»-transfer?
- •

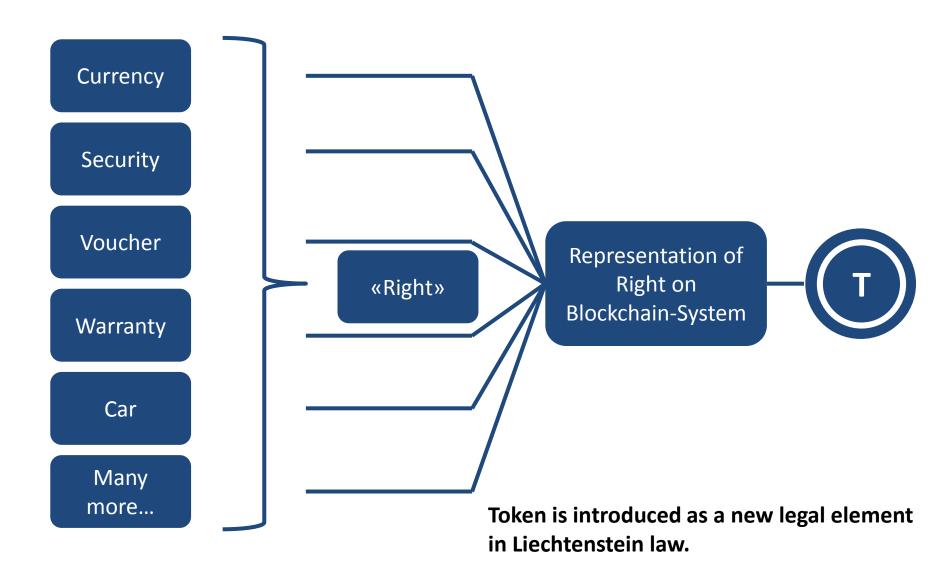


Legal Classification of Token





«Token Container Model»





Advantages of the Token Container Model

All existing and many future applications of Token Economy are covered

- Bitcoin = Empty Container
- Security Token = Container is filled with Security
- Utility Coin = Container is filled with Software Usage Right

Legal consequences depend on application

- Security Token => Security Laws and Financial Market Laws are applicable
- IP Right Token => IP Law is applicable

Relation between Token and Right can be clarified

- Legal status of Token Owner and Possessor
- Legal consequences of Token transfer



Main drivers of Token Economy

Token Container Model

Civil Right for Token

Regulation of Service Providers

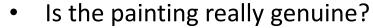
«Trust»



Public law **Need to regulate Service Providers?**

Example: Tokenization of physical assets





- Is the value really USD 793 Mio.?
- Is the painting stolen?





- Is he really the owner?
- Is the painting existing?
- Does the Token represent the Ownership Rights of this painting?
- Is the Token well programmed?
- Am I really the new owner if I buy the Token?



Illustration

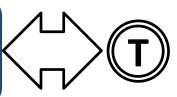
Physical Validator

- Interface between «real» world and Blockchain
- Ensuring that Asset is stored safely





Physical Validator





Safe Storage

Token

- certificate of authenticity
- certificate of origin
- certificate of value



Token Generator

- Technical Correctness
 - Legal representation

Token Generator



Basic Roles in Token Economy

Physical Validator

Token Generator

Token Issuer

TT Depositary

TT Protector

TT Exchange Service

TT Verifying Authority TT Identity
Service
Provider

TT Price Service Provider

TT: Trustworthy Technologies (e.g. Blockchain)



Goals of the Blockchain Act

- Legal Certainty for Token Economy
 - Users
 - Service Providers
- Creating Trust in order to foster efficiency of Token Economy
- Guidelines for Token Economy
 - Requirements for Service Providers
 - Basic information sheet
 - AML Requirements



European Union

- Token Economy will be one of the important driver of digital economy
- Token Economy needs clear, appropriate and supportive rules
- EU is in a perfect starting position to be the leading region for tokenization



Idea 1: EU-Token Model

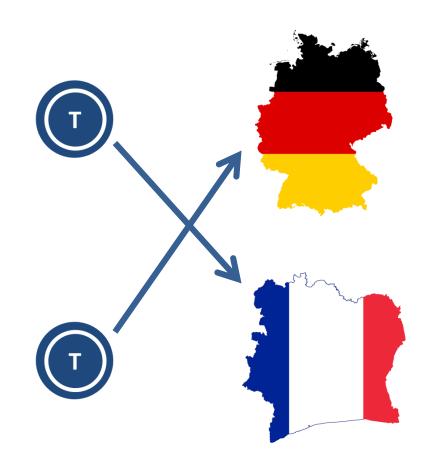
- Token = Instrument for digital representation of a «Right»
- Any kind of «Rights» can be represented
- The special regulation of the represented «Right» is applicable
- Clarification: Possession, Ownership, connection between token and right, consequences of a transaction



Idea 2: Legal Framework for cross-border tokenisation









Thank you for your attention

