

# EXECUTIVE SUMMARY

## of the “Tokens and TT Service Providers Law” AKA the “Liechtenstein Blockchain Act”

Capitalizing on the opportunity to create a friendly regulatory atmosphere for entrepreneurs and consumers alike, the Liechtenstein government has put forth the Liechtenstein Tokens and Trusted Technologies Law, or TVTG. With a law and government consultation report spanning 380 pages, the law is designed to enable crypto and blockchain projects to thrive, while at the same time providing consumers with a basis for trusting in these new technologies.

Presenting a technology that has taken the world by storm, blockchain is changing how the physical world interacts with the digital world, consequently demanding that new legal definitions be put forth in order to bridge this gap between the “online” and “offline” realms. The TVTG is designed to solve the aforementioned problems, thus creating legal certainty within a token economy.

### The Liechtenstein Approach

One of the first questions that arose in Liechtenstein, was whether or not a determined law is a possibility. Due to Liechtenstein’s status as an EEA member state, this requires compliance with codified EU/EEA guidelines and regulations. These base line regulations create a floor that Liechtenstein legislators are able to build upon. Building on this regulatory foundation, the TVTG instates certain registration requirements for Trusted Technology service providers and minimum standards for token issuance that are unique to Liechtenstein. In other words, the registrations issued under the foundational regulations and directives of the **EU/EEA remain passportable** to other EU/EEA mem-

ber states, while the Liechtenstein unique registrations are designed to serve as a mark of quality and integrity and are not passportable. This is designed to provide entrepreneurs with legal certainty, as well as providing consumers with a basis for trusting in these technologies.

When legislating in the technology space, there is always the risk that legislation put forth will become obsolete with growth and development. Recognizing this risk, Liechtenstein legislators have instead taken a proactive approach which avoids this problem. This preemptive method is employed by putting forth a technologically neutral and all-encompassing framework designed to capture all aspects of tokenization. In particular, capturing the functions of tokens such as legitimization (for the benefit of the beneficiary or creditor), liberation (in favor of the debtor, and transportation (transfer of the underlying right).

## How to develop a tech law frame work



**Build up Knowledge**  
(Bitcoin, Ethereum, ERC,...)



**Is Regulation  
needed?**



**EU/EEA  
compatible?**



**Token Container  
Model**

# TCM

## Token Container Model

„Tokenisation“ through Representation of rights

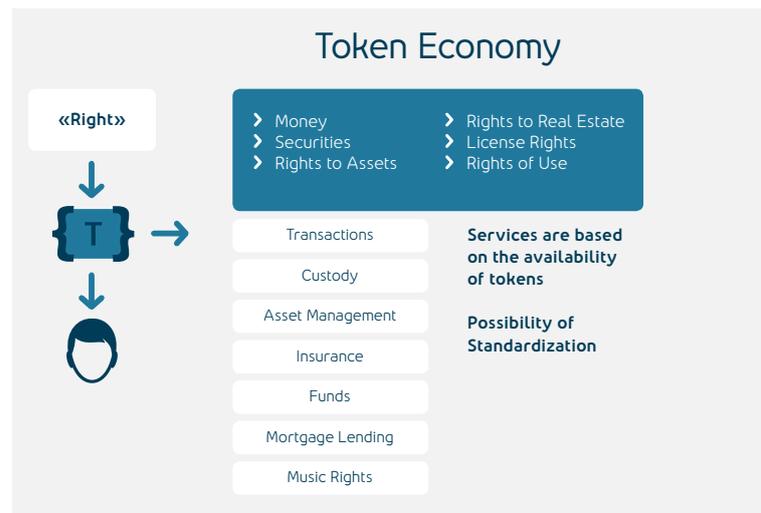
This created the need for a technologically neutral and agnostic token definition, leading to coinage of the “Token Container Model,” or TCM, which lies at the heart of the TVTG. Within this framework, a token serves as a container with the ability to hold rights of all kinds, whether that be the right to something represented – examples including real estate, stocks, bonds, and gold; or nothing – encompassing digital code, the most notable example being Bitcoin. Consequently, this progressive model provides legal certainty surrounding pre-existing rights that are tokenized, as well as rights to digital information on blockchain based systems.

Thus, the approach of the regulation is twofold. On one hand, the act clarifies pre-existing law - **providing a civil law basis** for ensuring that the underlying right represented by the token is effectively transferred from party A to party B. On the other hand, the act provides regulatory and supervisory rules regarding those interacting with TT Systems – including consumers, TT service providers, and intermediaries.

While pre-existing law provides a legal basis for what constitutes an effective transfer of property, there is a need for clarity surrounding what constitutes **effective transfer of a tokenized property**, as well as what constitutes effective transfer of these newfound digital assets in general. Therefore, the TVTG provides that transfer of a token on a TT system constitutes a binding transfer of the underlying right, whether that be a right to a physical object or a digital asset.

Regarding physical assets, this calls for a need to bridge the gap between the “offline” and “online” world, and assurance that the

underlying right embodied by the token actually exists. This is accomplished through regulatory aspects of the act creating the role of the “Physical Validator” who ensures that the party tokenizing the right to something represented “online” is in fact the person who possesses that right “offline.” Therefore, this confirmation by the physical validator allows for tokenization of a pre-existing legal right and its subsequent valid transfer on a TT system.



## Funktionen of a Token



### Legitimization

(for the benefit of the beneficiary or creditor)



### Liberation

(in favor of the debtor)



### Transportation

(Transfer of the underlying right)

# TRANSACTION SYSTEMS

TT systems are defined as transaction systems, which ensure secure transmission and retention of tokens by use of trusted technologies.

These technologies ensure the integrity of tokens, association of tokens with their TT identifier (e.g. public key) and the user's disposal of tokens on TT systems. Further defining elements of the token economy, the TVTG puts forth various roles and requirements such as the following:

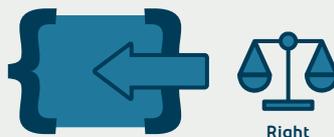
- **TT Identifier:** A unique identifier enabling allocation of tokens (e.g. a public key).
- ✓ **TT Key:** A key enabling disposal of tokens (e.g. a private key).
- ✓ **Basic Information:** A requirement to put forth basic information on tokens offered to the public, allowing a user to develop an informed opinion in regards to the rights and risks associated with the tokens, as well as the rights and risks related to the involved TT Service providers.
- ✓ **TT Service Provider:** A person or entity carrying out functions within a token economy.
- ✓ **Token Issuer:** A person or entity offering tokens to the public on its own behalf or that of another person or entity
- ✓ **Token Generator:** A person or entity generating tokens.
- ✓ **TT Key Depositary:** A person or entity acting as a custodian, holding the keys on behalf of the principal.
- ✓ **TT Token Depositary:** A person or entity who holds tokens on behalf of another person or on another person or entity's account.
- ✓ **TT Protector:** A person or entity holding tokens in their own name on a TT system for the benefit of a 3rd party.
- ✓ **Physical Validator:** A person or entity who ensures the existence and enforcement of contractually obligatory rights to property represented on a TT system – in the sense of property law.
- ✓ **TT Exchange Service Provider:** a person or entity who exchanges fiat (legal tender) for tokens (or vice versa).
- ✓ **TT Verifying Authority:** A person who verifies the legal capacity and requirements for token disposal.
- ✓ **TT Price Service Provider:** A person or entity providing TT system users with aggregated price information based on buy and sell offers or completed transactions.
- ✓ **TT Identity Service Provider:** A person who identifies the person authorized to dispose of a token on a TT system, and enters or registers this person in a directory.

## Physical Validator



1.

takes the physical asset in custody



2.

Token represents the right.



3.

Disposal over the Token results in the disposal over the right!

# THE RELATIONSHIP MODEL

This intuition is also witnessed by carefully crafted definitions surrounding the “private” vs. “public” key pair.

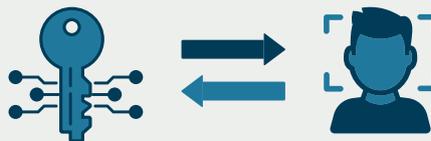
Instead of using these definitions that could be considered by some as misleading, the TVTG provides that what is traditionally described as the private key is a TT key, while what is traditionally described as a public key is instead a TT Identifier that allows for the clear assignment of tokens upon a transfer.

This distinction is due to the fact that TT keys can carry with them both the power of disposition and the right to dispose. In other words, there can be a person who knows the sequence that is the private key, versus the person who is entitled to use that key to effectuate disposal of a token.

Furthermore, the law provides guidelines in the event that a user holding a token representing a right loses access to their token, such as in the case of the loss of a TT key, highlighting the existence of court proceedings for proof of ownership.

In addition to the recognition of specialized TT service provider roles, the TVTG also instates registration duties, and requirements that vary based on the role filled. These requirements include personal requirements, organizational requirements, minimum capital requirements, and the presence of special internal control mechanisms when providing a TT service; as well as minimum and maximum operational fees. Most notably, the legislation requires that the role of TT Protector be reserved to those licensed as a Liechtenstein Trustee, seeing that role constitutes management of a cryptographic assets in the Trustee’s own name for the benefit of one or more third persons.

## Relationship Model



### TT keys (aka private key)

article 2, paragraph 1, lit. f TVTG  
 (“a key that allows for disposal over Tokens”)

### TT Identifier (aka public key)

article 2, paragraph 1, lit. e TVTG  
 (an identifier that allows for the clear assignment of Tokens)

## Overview of Registration Requirements I/2

	Token Generator	Token Issuer	TT Key Depository	TT Token Depository	Physical Validator
Registration Duty	✓	✓*	✓	✓	✓
<b>REQUIREMENTS</b>					
<b>Personal</b> Reliability (bankruptcy and criminal law)	✓	✓	✓	✓	✓
<b>Organizational</b> Suitable business structure and appropriate written internal proceedings and control mechanisms	✓	✓	✓	✓	✓
<b>Minimum Capital</b>	✗	Token <= 5 Mio = 50k Token > 5 Mio = 100k Issuance > 25 Mio = 250k	100k	100k	Varies depending on value of the property being guaranteed max. CHF 250'000
<b>Special internal control mechanisms</b>	✓	✓	✓	✓	✓
<b>Licensed as Trustee</b>	✗	✗	✗	✗	✗
<b>SUPERVISORY FEES</b>					
<b>Minimum Fee</b>		CHF 500	CHF 500	CHF 500	CHF 1'000
<b>Fee</b>	CHF 250	0.25% of CHF equivalent value of money recieved during issuance	0.25% gross revenue received from services provided.	0.25% gross revenue received from services provided.	0.25% gross revenue received from services provided.
<b>Maximum Fee</b>		CHF 100'000	max. CHF 100'000	max. CHF 100'000	max. CHF 100'000
<b>DUE DILIGENCE ACT APPLICABLE</b>					
	✗	✓	✓	✓	✓

\* Not required if tokens are issued in issuer's own name or on behalf of principal and if issuance volume over 12 months does not exceed CHF 5 million."

## Registration procedure Art. 18 TVTG



## Overview of Registration Requirements 2/2

	TT Protector	TT Exchange Service Provider	TT Verifying Authority	TT Price Service Provider	TT Identity Service Provider
Registration Duty	✓	✓	✓	✓	✓
<b>REQUIREMENTS</b>					
<b>Personal</b> Reliability (bankruptcy and criminal law)	✓	✓	✓	✓	✓
<b>Organizational</b> Suitable business structure and appropriate written internal proceedings and control mechanisms	✓	✓	✓	✓	✓
<b>Minimum Capital</b>	✗	Varies depending on trading volume and value of trades conducted max. CHF 100'000	✗	✗	✗
<b>Special internal control mechanisms</b>	✓	✓	✓	✓	✓
<b>Licensed as Trustee</b>	✓	✗	✗	✗	✗
<b>SUPERVISORY FEES</b>					
<b>Minimum Fee</b>	CHF 500	CHF 500			
<b>Fee</b>	CHF 50 per b. relationship. rel. for due diligence	0.25% of the exchanged cryptocurrencies and monies in CHF	CHF 250	CHF 250	CHF 250
<b>Maximum Fee</b>	max. CHF 100'000	max. CHF 100'000			
<b>DUE DILIGENCE ACT APPLICABLE</b>					
	✓	✓	✗	✗	✗

## TVTG

At its core, the TVTG is focused on adapting pre-existing laws to foster legal certainty within a token economy.

Drawing a clear line between what falls civil law versus regulatory and supervisory law; the TVTG includes adaptations of the Liechtenstein Persons and Companies Act, Trade Act, Due Diligence Act, and Financial Market Authority Act.

Where are we now in the movement towards passage of this legislation?  
Having passed through the first reading in parliament, we are happy to announce that the TVTG is well on its way to enactment.

The full version of the Liechtenstein Blockchain Act, or “Tokens and TT Service Providers Law” (TVTG), along with the translated Government Consultation Report, is available here:

**English:** <https://nlaw.li/tvtgen> **Deutsch:** <https://nlaw.li/tvtgde>

