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MEMORANDUM TZBTC

To: Swiss Crypto Tokens AG ("**Client**")

From: Christian Meisser and Anna Maria Tonikidou from LEXR AG

Re: Qualification of emission of the TZBTC token and related activity under Swiss Law

Date: 29/08/2019

1 INTRODUCTION

We were asked by Client to write this memorandum (the "**Memorandum**") regarding the qualification of a Bitcoin stable coin emitted on the Tezos blockchain ("**TZBTC**") under Swiss law and the applicability of Swiss financial market regulations to the involved parties.

After an executive summary (Section 2), we outline our understanding of the issuance of TZBTC (Section 3), qualify the TZBTC token in view of the current practice of the Swiss Financial Market Supervisory Authority ("**FINMA**"), current case law and legal doctrine (Section 4), and then examine the applicability of Swiss financial market regulations to the involved parties (Section 5), followed by a conclusion (Section 6).

This Memorandum reflects our view under Swiss financial market regulation, taking into account current legal doctrine, draft regulatory proposals and regulatory practice, noting, however, that there is an inherent degree of regulatory uncertainty in any blockchain-related project as the Swiss regulatory body was mainly enacted prior to the advent of the blockchain technology. The practice of FINMA may change or not be fully established with regards to all questions relating to the project, and Swiss courts may challenge FINMA's interpretation of the law. FINMA also considers each case individually and may reach different conclusions. Any analysis of non-Swiss law or other Swiss law questions relating to the TZBTC, such as tax treatment, are out of scope of this Memorandum.

2 EXECUTIVE SUMMARY

The goal is to enable the compliant issuance of a fully Bitcoin-backed token on the Tezos blockchain while eradicating the risks of a single-point-of-failure. This is achieved by dividing the various tasks for the issuance into (i) Keyholders that are responsible for the custody of Bitcoins and the issuance of respective TZBTC based on a m-out-of-n multi-signature setup, and (ii)

regulated financial intermediaries that act as Gatekeepers to ensure compliance with money-laundering and terrorist financing legislation.

Based on our analysis:

1. The TZBTC qualifies solely as a payment token and in particular not as a security token within the meaning of the FINMA guidelines (the "**Guidelines**")[1]. Also, the TZBTC does not qualify as a security under Swiss securities law.
2. Neither the Keyholders nor the Gatekeepers accept deposits from the public on a professional basis in the sense of Art. 1 (2) BA.
3. Both the Keyholders (as issuers) and the Gatekeepers (as money exchange business) must comply with AMLA requirements. The Gatekeepers can exercise the respective requirements on behalf of the Keyholders.
4. No other Swiss financial market regulations apply to the involved parties.

3 OVERVIEW

3.1 Introduction

3.1.1 No interoperability

Different blockchains are generally not directly interoperable, i.e., a unit of account (or 'token') of one blockchain cannot simply be converted into a token of on another blockchain. There is, however, a practical need to allow for such convertibility: E.g., holders of tokens of one blockchain may wish to use the value of their token to interact with certain functionalities of another blockchain without having to rely on a central counterparty for intermediation, or, similar to tokens that reflect the value of a fiat currency or a physical asset such as gold (usually referred to as 'stablecoins'), the more stable value of certain tokens should be reflected by another token on another blockchain. A token that reflects the value of a token of another blockchain is often referred to as a 'proxy token' or 'cross-chain token'.

[1] Guidelines for enquiries regarding the regulatory framework for initial coin offerings (ICOs) dated 16 February 2018.

3.1.2 Current solutions introduce a single point of failure or lack of compliance

There are various approaches to issuing such proxy tokens. However, most require a central intermediary which holds tokens of one blockchain on behalf of users and issues the proxy tokens with the promise (or legal obligation) to return the original token if the user transfers the issued token back to the intermediary. Such introduction of a central intermediary is not only (i) counter to the general characteristics of blockchain systems as 'trustless' decentralized structures, but also (ii) poses a risk to the users as their funds are dependent on a single point of failure (e.g., bankruptcy or fraud by the financial intermediary).

Other purely technical solutions with, e.g., 'side-chains' operated in a decentralized way, raise questions around legal accountability for the transactions executed through such side-chains: If and to the extent such side-chains are considered to act as a financial intermediary or otherwise in the ambit of financial market regulation, such solutions could be abused for money-laundering and there is no individual entity that could be held accountable for non-compliance. This may lead to a less secure financial market and exposes all involved parties to enforcement risks that are currently difficult to assess.

3.1.3 Combining compliance and decentralization

The goal with TZBTC is to leverage the advantages of a decentralized setup (no single point of failure) while ensuring compliance through the involvement of regulated entities for the issuance and redemption of the proxy token. In short, the Project aims at issuing a Bitcoin proxy token on the Tezos blockchain, the TZBTC, that (i) reflects the value of Bitcoin and is fully 1:1 backed by Bitcoin, (ii) protects users from any risks to the greatest extent possible, in particular through independence of any central intermediary or other single point of failure, (iii) minimizes risks of abuse for money laundering and terrorist financing purposes, and (iv) minimizes any remaining legal uncertainty associated with the transferability of legal claims under Swiss law (in particular the written form requirement).

3.2 Involved Parties

Multiple types of parties are involved in the issuance of TZBTC:

- Two blockchain-based items are required: An address on the Bitcoin blockchain for the storage of the Bitcoin that back the TZBTC, and a smart contract on the Tezos blockchain

for the issuance and destruction of TZBTC. The keys for access to the address on the Bitcoin blockchain on which the Bitcoin are held, and the keys for the smart contract on the Tezos blockchain that governs the issuance of TZBTC, are held with multiple keyholders based on a 'm-out-of-n' signature setup (the "**Keyholders**"), whereas m is the number of signatures required to initiate any transactions and n is the total number of keys. M must be larger than 1 and n must be larger than m, so that the default of a single (or even multiple) Keyholders, e.g., due to bankruptcy, does not affect the ability of the remaining Keyholders to trigger transactions, and no single Keyholder has the power to dispose over the Bitcoin or the TZBTC smart contract individually. The Keyholders are selected for their trustworthiness and independence from each other to increase trust in the TZBTC and reduce the risk of fraud to a minimum.

- The Keyholders solely enter into contracts with multiple independent and regulated financial intermediaries that are responsible for the compliant issuance of TZBTC (the "**Gatekeepers**"). The Gatekeepers deposit Bitcoin on the respective address and receive, in exchange, TZBTC from the Keyholders. Also, Gatekeepers receive, against return of TZBTC, the respective amount of Bitcoin.
- Anyone that complies with the regulatory requirements of the Gatekeepers can buy or sell TZBTC in exchange for Bitcoin from the Gatekeepers and subsequently use the TZBTC (the "**End Users**"). The value of the TZBTC for the End Users is based solely on economics: They can reasonably assume that any Gatekeeper will pay them the respective value for a TZBTC (minus a transaction fee) as any Gatekeeper can redeem the TZBTC for Bitcoin with the Keyholders. The competitive market between Gatekeepers leads to lower transaction fees.
- To ensure independence of the Keyholders and Gatekeepers amongst each other, an independent third-party association establishes the standard contracts to be used between Gatekeepers and Keyholders and searches for suitable replacements in case a Keyholder or a Gatekeeper is no longer viable or bankrupt (the "**Association**").

3.3 Relationship between the Parties

The relationship between the parties is as follows:

- **Keyholders and Gatekeepers:** Each Gatekeeper has a contract with each Keyholder according to which the Keyholder is obliged to sign a transaction to reflect the Gatekeeper's desired transaction, i.e., if the Gatekeeper sends:
    - Bitcoin to a pre-determined address, the Keyholder is required to sign a transaction to issue TZBTC to the Gatekeeper, and
    - TZBTC to a pre-determined address, the Keyholder is required to sign a respective transaction to transfer Bitcoin to the Gatekeeper.

  It does not matter which Gatekeeper originally sent the Bitcoin to the Keyholder – any Gatekeeper can redeem Bitcoin from the Keyholders if and to the extent that they are in possession of TZBTC, so that the default of any Gatekeeper has no negative impact on the value of TZBTC.
- **Gatekeepers and End Users:** Once in possession of TZBTC, Gatekeepers can sell the TZBTC to End Users as they would any other cryptocurrency: Based on applicable know-your-customer ('KYC') requirements, the Gatekeepers identify the End Users and execute the respective trade. After the trade is executed, there is no further relationship between the End Users and the Gatekeeper. The End Users have no claim, legal or otherwise, against this Gatekeeper or any other involved party. However, **End Users know that any Gatekeeper can redeem the TZBTC against a pre-determined amount of Bitcoin from the Keyholders and therefore can have the reasonable expectation that any Gatekeeper will pay them the respective value for their TZBTC.**
- **Keyholders and End Users:** There is no relationship, legal or otherwise, between the Keyholders and End Users. End Users have no claim whatsoever against Keyholders.
- **The Association and the other parties:** There is a certain degree of alignment required between each of the Gatekeepers and Keyholders (between and amongst each other). At the same time, both the actual independence as well as the appearance thereof is essential for public trust in the TZBTC. Therefore, an Association as an independent body is used to foster alignment between the parties so that the relationship between the parties can be limited, legally and factually, to the contractual obligations between the Gatekeepers and the Keyholders. The tasks of the Association include:

- Issuance (and update(s) as required) of a standard contract between Gatekeepers and Keyholders;
- Acting as optional (but not compulsory) channel of communication between Gatekeepers and Keyholders for the issuance and redemption of TZBTC;
- Addition, removal and replacement of Gatekeepers;
- Reaction in case of default of a Keyholder (finding of replacement, recovery of the lost key or issuance of new keys to all Keyholders) – a potential additional safeguard could be that the Association rents physical key storage devices such as a USB stick to the Keyholders so that the Association can, solely in case of bankruptcy, recover the device incl. the key from the bankruptcy estate (*Aussonderung*).

It is important to ensure that the Association itself has no factual or legal power to dispose over the stored Bitcoin or the TZBTC smart contract. All essential functions can, at any time, be executed without the Association – its role is limited to facilitating the execution thereof and increasing the independence of the other parties.

3.4 Economic Function of the TZBTC

The TZBTC, as a token backed by a 1:1 storage of Bitcoin, has the same economic function as Bitcoin as a currency, i.e., a store of value, unit of account and a medium of exchange. The only difference is that the TZBTC can interact with the functionalities of the Tezos blockchain, e.g., the TZBTC can be used more easily as a medium of exchange for the purchase of services or other tokens on the Tezos blockchain. As an illustration: If Alice wishes to purchase a Tezos-based token ABC with Bitcoin from Bob without trusting Bob and vice versa, Alice and Bob would regularly require a central intermediary to execute the trade. However, with TZBTC, Alice and Bob could rely on a smart contract to execute the trade peer-to-peer without relying on a central intermediary.

There is no further economic function beyond the function as a currency on the Tezos blockchain. In particular, the TZBTC does not serve any investment or speculation purpose or other type of function of a financial instrument such as a future, option, swap, forward or other type of derivative: There is no pre-defined delivery date as in a forward contract or any expectation of any deviation from the 1:1 exchange rate, and – unlike certain derivatives that serve the function of increasing

access to a hard-to-trade asset – the TZBTC are *less* easy to trade than Bitcoin due to the more widespread usage and acceptance of Bitcoin.

4 LEGAL ASSESSMENT OF THE TZBTC TOKEN

Before we analyze the activities of the various parties from a financial market regulatory perspective, we conduct a legal assessment of the TZBTC as it will be put into circulation to the End Users by the Gatekeepers. The relationship between the Keyholders and the Gatekeepers will be assessed in the next section.

4.1 Introduction of the Swiss legal landscape regarding token classifications

There is no generally recognized classification of tokens, neither internationally nor in Switzerland. Also, the Swiss legislative and judicial branches, as of today, had little opportunity to address the legal questions around tokens. FINMA, as the executive body charged with monitoring and taking the necessary and proportionate measures to establish compliance with Swiss financial market law, has issued the Guidelines of 16 February 2018 to give general guidance to market participants on how FINMA treats tokens from a regulatory perspective. It should be emphasized, however, that FINMA has no (or only very limited) authority to legislate or rule on Swiss financial market law. The Guidelines and FINMA's qualification of a token should therefore be viewed simply as FINMA's non-binding interpretations of Swiss financial market law. The legislation is subject to the legislative process, and binding rulings on Swiss financial market law is incumbent upon the Swiss court system. Since FINMA does not have the authority to create new categories of securities or bindingly interpret the term securities, it is prudent to conduct an analysis both (i) based on the Guidelines, and (ii) independently of the Guidelines, in light of Swiss law, legal doctrine, and case law.

4.2 Token classification under the Guidelines

The following assessment is based on FINMA's approach to categorize tokens on the underlying economic function of the token.

4.2.1 Payment token

According to Section 3.1 of the Guidelines, FINMA categorizes tokens which are intended to be used, now or in the future, as means of payment for acquiring goods or services or as means of

money or value transfer as payment tokens. Payment tokens, which are synonymous with cryptocurrencies, give rise to no claims on their issuer.

A TZBTC can and is intended to be used as a means of payment on the Tezos blockchain. Also, it does not give rise to any claims on the issuer: End Users have no legal claim by virtue of their ownership of TZBTC. Gatekeepers can redeem Bitcoin with TZBTC, however, such claim is not tied to the TZBTC token directly but based on their non-transferable contract with Keyholders.

As a result, the TZBTC is a payment token under the Guidelines.

4.2.2 No utility token

According to Section 3.1 of the Guidelines, FINMA categorizes tokens which are intended to provide access digitally to an application or service by means of a blockchain-based infrastructure as utility tokens.

The TZBTC has no such functionality and, as such, is not a utility token under the Guidelines.

4.2.3 No asset token

Section 3.1 of the Guidelines describes the following types of asset tokens:

1. Tokens that represent assets such as a debt or equity claim on the issuer and, in terms of their economic function, are analogous to equities, bonds or derivatives; and
2. Tokens that enable physical assets to be traded on the blockchain.

Regarding the first category: the TBZTC does not fall under this category as (i) it does not represent any claim of any type, and (ii) the economic function is solely that of a currency, not that of an equity, bond or derivative.

Also, the TZBTC does fall in the second category as it does not allow the trading of any physical asset on the blockchain.

As there is no claim against the issuer of the TZBTC Token, and the TZBTC Token does not represent a physical asset, the TZBTC is not an asset token according to the Guidelines.

4.2.4 No hybrid token

According to the Guidelines, the above-referenced token classifications are not mutually exclusive, e.g. a token may qualify as an asset token and a payment token at the same time (referred to as 'hybrid tokens').

Based on the above analysis, the TZBTC Token is to be classified solely as a payment token within the meaning of the Guidelines.

4.2.5 No security token

According to the Guidelines, asset, utility, and payment tokens may qualify as securities under Swiss financial market law. The Guidelines repeat the statutory definition of securities under the Financial Market Infrastructure Act (FMIA) which are outlined in further detail in the next section.

FINMA further refers to the definition of 'uncertificated securities' and clarifies that the formal requirement of uncertificated securities under the Swiss Code of Obligations (CO), keeping a book in which details of the number and denomination of the uncertificated securities issued and of the creditors are recorded (Art. 973c para. 3 CO), can be accomplished digitally on a blockchain.

As these definitions are rather vague for the purposes of a token appraisal, FINMA detailed its practice in the Guidelines:

- **Asset tokens:** FINMA treats all asset tokens as securities.
- **Payment tokens:** For payment (and utility) tokens, the Guidelines require a further distinction: Relating to payment tokens, FINMA's practice is that, since payment tokens are designed to act as a means of payment and are not analogous in their function to traditional securities, they should generally not be treated as securities. However, payment tokens may qualify as securities if there is an *investment purpose.*
- **Utility tokens:** These are not securities if they grant access rights and there is no connection with capital markets. Conversely, utility tokens can be security tokens if there is an *investment purpose* at the point of issue or sale (e.g., because the functionality to which the utility token grants access is not or not fully functional yet).

With respect to the investment purpose, such purpose may, according to FINMA, in particular be present in case of a pre-functional token, i.e. the token already exists but cannot be used yet for

its intended (or marketed) purpose. From what development stage the token passes from bring pre-functional to functional is unclear.

Presently, the TZBTC is fully functional at the point of issue and there is no indication that the TZBTC is, or would be marketed as, an investment opportunity in the sense of an equity, bond or derivative.

As the TZBTC is solely a payment token without any investment or other speculation purpose and with full functionality at the point of issue, it is not deemed a security token according to the Guidelines. It should, however, be emphasized that the Guidelines are FINMA's non-binding interpretation, and a separate token assessment under Swiss financial market law is required. Also, should the setup be used to make securities or physical goods tradeable on the Tezos blockchain, the token on the Tezos blockchain would very likely also be deemed a security.

4.2.6 Resulting classification under FINMA Guidelines

Based on the foregoing analysis, we consider the TZBTC to be a **payment token**. The TZBTC is not a security under the Guidelines.

4.3 Token classification under Swiss Financial Market Law

4.3.1 Overview

The TZBTC is also not a security under Swiss Financial Market Law.

According to Art. 2(b) FMIA, securities are standardized certificated or uncertificated securities, derivatives and intermediated securities that are suitable for mass trading. Based on this definition, a token represents a security if both of the following requirements are met: First, the token is standardized and suitable for mass trading ('tradability'); and second, the token qualifies as one of the following types of securities: a certificated security, uncertificated security derivative, or intermediated security ('type').

4.3.2 Tradability

The TZBTC are **standardized** and **suitable for mass trading**.

Art. 2(b) FMIA states that certificated or uncertificated securities, derivatives, and intermediated securities are only considered as securities if they are standardized and suitable for mass trading.

The Financial Infrastructure Ordinance (FMIO) further specifies that these criteria are met if they are (i) publicly offered for sale in the same structure and denomination, or (ii) placed with more than 20 clients, insofar as they have not been created especially for individual counterparties.

Based on their open nature, the TZBTC can be deemed to be offered publicly. Moreover, since the TZBTC can be purchased only in the same structure and denomination, they can also be considered standardized.

4.3.3 Types of security

Despite its tradability, the TZBTC **does not qualify as any of the types of security** and therefore should not be treated as such under Swiss law.

The definition of securities under the FMIA is misleading as it contains two subtypes, (i) the certificated, uncertificated and intermediated securities that are characterized by their formal appearance as one of these three forms defined in Swiss civil law, and (ii) the derivates that are defined by the rights associated with it. Legal scholars therefore propose to base the analysis on two separate criteria, namely (i) on the formal appearance, and (ii) on the rights associated with the specific formal appearance.

Formal appearance: A security can take the form of a certificated security, uncertificated security, intermediated security or derivatives contract. As per the Guidelines, tokens may take the form of uncertificated securities, with the blockchain serving as the required ledger to keep book of the creditors of the debtor (i.e., the token issuer). FINMA practice seems to be that such uncertificated securities are issued even when the issuer has no intention to do so (or even knowledge of such issuance). However, the law requires that such issuance of uncertificated securities has a basis in the terms of issuance or articles of association, and legal scholars argue that thus a conscious act to issue uncertificated securities is required by the issuer in order to qualify as uncertificated security.[2] Tokenized derivatives contracts are not extensively discussed in legal papers, but tokens can likely also take the form of an entire contract such as bilateral derivatives contracts.

Associated rights: A security, regardless of form, requires to be associated with a right. A right (or obligation) is a legal relationship between parties according to which the creditor can request a specific action or omission, and the debtor is obliged to act or omit accordingly. Typically, rights

[2] ESSEBIER JANA / BOURGEOIS JANIQUE, Die Regulierung von ICOs, in: AJP 2018 S. 572

associated with securities are related to capital market instruments such as shares, bonds, options, mortgages etc., but the type of rights that can be embedded in a certificated, uncertificated or intermediated security is not specifically limited by Swiss law. Regarding derivative contracts, Art. 2 FMIO deems derivatives to comprise financial contracts whose price is derived specifically from assets such as shares, bonds, commodities and precious metals, or reference values such as currencies, interest rates and indices. The legal derivatives definition is considered excessive by legal scholars and, while the law outlines certain exceptions (including spot transactions), it is argued that instruments that cannot typically be assigned to capital markets or which only have a partial derivative component are subject to the security definition.[3]

TZBTC neither take the form of a security nor are there any rights associated with the token. Specifically, TZBTC are not certificated or intermediated securities, and as there is no basis in any terms of issuance or articles of association (neither even exist), they are not uncertificated securities. Also, the TZBTC do not represent a bilateral derivatives contract, as there is no contract in the first place: The contract between the Gatekeeper and the End User is typically a simple spot transaction where the TZBTC are sold for a different currency. There is no ongoing legal relationship or any claim whatsoever linked to the TZBTC – owning TZBTC does not entitle the End User to a claim to the equity or the debt of any legal entity, or any other legal right such as a repayment obligation (see also Section 5.5 below where we discuss the Project as a potential simple partnership and, as such, a theoretical counterparty to a claim). In view of the above as well as the lack of an economic function that is typically associated with regulated securities, the conclusion under Swiss securities law follows the conclusion of the analysis according the Guidelines, i.e., that the TZBTC does not qualify as a security under Swiss law.

5 LEGAL ASSESSMENT OF THE INVOLVED PARTIES

In the section above, we have established that the TZBTC is a payment token according to the FINMA guidelines and does not constitute a security. We now assess if and to what extent the various parties and their actions in relation to the issuance and management of the TZBTC may be subject to Swiss financial market regulation, in particular the Swiss Banking Act (BA), the Swiss

[3] KRAMER, STEFAN / FAVRE, OLIVIER, Kommentar zum Finanzmarktinfrastrukturgesetz FinfraG, Art. 2 lit. c Begriffe: Derivate oder Derivatgeschäfte, N 5, 23

Financial Market Infrastructure Act (FMIA), the Swiss Federal Act on Stock Exchanges and Securities Trading (SESTA), and the Anti-Money Laundering Act (AMLA).

5.1 Banking Act

5.1.1 Definition of deposit in the sense of the Banking Act

Art. 1 (2) BA forbids the **acceptance of deposits** from the public on a commercial basis as well as the advertisement of such actions (Art. 49 (1) (c) BA) to persons without a banking license.[4]

In principle, **all liabilities** are considered deposits.[5] Providers who maintain custody of cryptocurrency funds for clients are generally subject to the BA[6] if the following three criteria for the acceptance of deposits are met (according to the Federal Council in its various reports on cryptocurrencies)[7]:

- the customer cannot dispose of the cryptocurrency at any time without the involvement of a merchant or custodian;
- the merchant or custodian has a payment obligation towards the customer; and
- in the event of bankruptcy, the received tokens would fall into the bankruptcy estate of the merchant or custodian.[8]

FINMA practice has further established an exception to the requirement of a banking license if cryptocurrencies are accepted (i) **exclusively for the safe custody or settlement**, and (ii) **are kept segregated for each user**, i.e. that each token can be allocated to an individual user at any given point in time (this is presumably, but not explicitly, linked to the third criterion of the stated requirements by the Federal Council, i.e., the tokens may not fall in the bankruptcy estate – or can

[4] HESS MARTIN, SPIELMANN PATRICK, Cryptocurrencies, Blockchain, Handelsplätze & Co. – Digitalisierte Werte under Schweizer Recht / III. Rechtliches, in: Reutter/Werlen (Hrsg.), Kapitalmarkt – Recht und Transaktionen XII, Zürich 2017, 178.
[5] HESS MARTIN, SPIELMANN PATRICK, 179.
[6] *ibid.*
[7] Der Bundesrat: Rechtliche Grundlagen für Distributed Ledger-Technologie und Blockchain in der Schweiz, Eine Auslegeordnung mit Fokus auf dem Finanzsektor, Bern, 7. Dezember 2018, 91f.
[8] SCHÖNKNECHT FLORIAN, GesKR 2016, 300, 309.

be retrieved therefrom *(Aussonderung)* – if the tokens are segregated on the blockchain. This is also the proposed language of the draft legislation[9]).

5.1.2 Crypto assets in the bankruptcy estate

Full segregation on the blockchain to allow for retrieval from the bankruptcy estate is only necessary if the blockchain-based asset falls in the bankruptcy estate in the first place. There are technical means to ensure that the blockchain-based assets do not fall in the bankruptcy estate at all: According to the practice of the Federal Supreme Court (cited also by the Federal Council and legal doctrine as applicable to blockchain-based assets), **an asset only falls in the bankruptcy estate if the estate has *custody* of the assets**.[10] Custody is defined as the "exclusive actual power of disposition".[11]

In this sense, Article 242 (3) of the Debt Collection and Bankruptcy Law already expressly provides that, in the event of joint custody, the asset in question does not fall into the bankruptcy estate.[12] **If this exclusive actual power of disposition is lacking**, there is **no custody of the bankruptcy estate**.[13]

The criterion of **exclusive actual power of disposition** can also be used **functionally** to decide whether **a certain blockchain-based asset is to be included in the mass or not,** since the actual power of disposition is not linked to the physicality of the asset in question.[14] The Federal Council and legal doctrine agree that a multi-signature setup where access to the crypto assets is not possible with only one key, but with several keys held by different parties, the crypto assets do not fall in the bankruptcy estate. Such a multi-signature address may require all keys (e.g. a '2 out of 2 multi-signature') or only some of the keys (e.g. a '2 out of 3 multi-signature') to dispose over the assets. Consequently, if a keyholder owns a key that is **part of a multi-signature address, the crypto-based assets would not fall into the keyholder's bankruptcy estate, and the keyholder is not considered as accepting deposits from the public.**

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[9] Vorentwurf des Bundesgesetzes zur Anpassung des Bundesrechts an Entwicklungen der Technik verteilter elektronischer Register vom 22. März 2019, S. 4 f.
[10] Bundesgesetz zur Anpassung des Bundesrechts an Entwicklungen der Technik verteilter elektronischer Register- Erläutender Bericht zur Vernehmlassungsvorlage vom 22. März 2019, S. 17.
[11] *ibid.*
[12] *ibid.*
[13] *ibid.*
[14] *ibid.*

As a result, crypto-based assets that are held in a multi-signature setup do not fall in the bankruptcy estate of an individual holder of keys, and, consequently, such deposit of crypto-assets is not treated as custody in the sense of the Banking Act.

However, in case of a m out of m multi-signature setup, the fate of the key of in the bankruptcy estate is unclear and thus exposes the depositor to certain risks (the bankruptcy estate may request payment for signing a transaction, or simply lose the key), even though the bankruptcy estate would not have direct access to the crypto asset. In case of a m out of n setup where m is greater than 1 and n is greater than m, the risk can be mitigated significantly, improving the safety for users.

In the setup of the TZBTC, no individual Keyholder has custody of the Bitcoin that back the TZBTC. Therefore, the Bitcoin would not fall in the bankruptcy of any Keyholder and the Keyholders therefore do not accept deposit in the sense of the Banking Act. The activity of the Keyholders consequently is not an activity regulated by the Banking Act. For the avoidance of doubt, the activity of the Gatekeepers is also not a regulated activity in the sense of the Banking Act, lacking both the power to dispose over the Bitcoin and any liability vis-à-vis any third party.

5.2 Applicability of the Anti-Money Laundering Act

According to FINMA practice, the issuance of payment tokens constitutes the issuance of a means of payment subject to the AMLA as long as the tokens can be transferred technically on a blockchain infrastructure. The requirements under the AMLA can be fulfilled by the issuing party directly of by having the funds accepted via a regulated financial intermediary who exercises the corresponding requirements on behalf of the organizer. Also, under current FINMA practice, the exchange of a cryptocurrency for fiat money or a different cryptocurrency is subject to the AMLA.

Under the setup of the Project, **AMLA obligations are highly likely to apply both to the Keyholders as issuers of the TZBTC as well as to the Gatekeepers for exchanging the TZBTC for fiat money or different cryptocurrencies**. For the issuance of the TZBTC to the Gatekeepers, the Gatekeepers can exercise the KYC obligations on behalf of the Keyholders, with the Gatekeepers verifying each other (we suggest including the respective obligations in the standard contracts between the Keyholders and the Gatekeepers). For the exchange of TZBTC by Gatekeepers with End Users, Gatekeepers are required to comply with their respective AMLA obligations.

5.3 Applicability of the Swiss Federal Act on Stock Exchanges and Securities Trading

A securities dealer includes, as per Art. 2 (d) SESTA, any natural person, legal entity or partnership that buys and sells securities on the secondary market in a professional capacity or creates derivatives and offers these to the public.

As the TZBTC does not qualify as a security, the issuance and sale thereof is outside of the scope of the SESTA.

5.4 Coordinated action of a group to circumvent applicable laws

There is a generally recognized principle under Swiss financial market law that regulatory requirements may not be circumvented through the coordinated action of formally separated legal structures.[15] According to the Federal Supreme Court, a holistic (economic) approach is warranted if (i) there are close economic (financial/business), organizational, and/or personal links between the parties, and (ii) only such holistic viewpoint can reasonably do justice to the facts and the goals of financial market regulation. Such close links can be indicated by the public appearance as a single unit or other facts that indicate a coordinated effort such as blurring of boundaries in terms of the legal structure and accounting, same legal seat, needlessly nested ownership structures or structures with intermediated fiduciaries.

For the issuance of TZBTC, we strongly recommend that parties (Keyholders, Gatekeepers as well as members of the Association) be chosen that are not only factually independent, but also appear independent in order to establish trust. If and to the extent the parties are selected to be fully economically independent and trustworthy companies (such as professionals, auditors, notaries, financial intermediaries and other established companies) with no or insignificant personal overlap in the controlling persons, the risk of being considered a group in the above sense is remote.

In any case, the setup of the Project is chosen to strengthen, not to circumvent, the regulatory goals:

[15] Für eine Zusammenfassung m.w.H: BENJAMIN BLOCH, HANS CASPAR VON DER CRONE, Begriff der Gruppe in Fällen unbewilligter Effektenhändlertätigkeit, in SZW 2010, S. 161 ff.

- The choice of a multi-signature setup drastically decreases the risk of loss of deposits due to bankruptcy – the default of a Keyholder does not affect the power of disposition of the other Keyholders.
- The multi-signature setup even removes the risk of a single point of failure and significantly decreases the risk of fraud. This increases user protection in comparison to other forms of custody outside of the scope of the Banking Act such as the full segregation of deposits.
- In contrast to most technical solutions for the issuance of proxy tokens, AMLA compliance can be achieved as the flow of funds is channelled through supervised financial intermediaries.
- The remaining legal uncertainty around the transfer of a claim without observance of the written form requirement that may negatively affect End Users is alleviated as the TZBTC does not represent a claim.

Assuming the independence of the involved parties and given the additional protection of users, considering the issuance of the TZBTC as a coordinated effort to circumvent applicable laws would be unprecedented in Swiss case law.

5.5 Keyholders and Gatekeepers as simple partnership

To capture decentralized systems from a legal perspective, legal scholars have floated (but ultimately questioned) the idea that participants in certain decentralized systems may be considered to act as a simple partnership (*einfache Gesellschaft*)[16], either in order to have an addressee of enforcement action in case of criminal acts or violations of financial market regulations, or in order to manufacture a legal claim of users of these systems against its (decentralized) operators. The decentralized nature is, however, counter to the notion of the simple partnership with an emphasis on the personal qualities of its members, requiring a mutual will to achieve a specific goal (*animus societatis*) and mutual fiduciary duties and duties of loyalty. Also, the unlimited, personal, joint and several liability of participants in decentralized systems (such as miners or other blockchain participants) is hardly expected by users. Furthermore, FINMA practice according to the Guidelines with regards to other decentralized projects for the issuance

[16] HESS, MARTIN / SPIELMANN, PATRICK, Cryptocurrencies, Blockchain, Handelsplätze & Co., Digitalisierte Werte unter Schweizer Recht, in: Kapitalmarkt – Recht und Transaktionen XII, S. 191

of payment tokens (such as Bitcoin and Ether) is to not view these as securities, implying that users have no legal claim against any of the (other) participants such as miners, the issuing entity or coders.

For the issuance of TZBTC, the relationship between the participants is either one of irrelevance of the other (between the Keyholders as they do not need to know each other or interact with each other), one of exchange (between the Keyholders and the Gatekeepers as special type of deposit contract), or one of competition (between the Gatekeepers, as they compete with each other to attract End Users). The identity of the participants is generally irrelevant to the other participants, and a mutual will to achieve a goal or an elevated personal relationship between the participants is not required – to the contrary, the incentives are such that a certain level of competition and acting in self-interest are to be expected. A qualification of the participants as a simple partnership is therefore, also in light of FINMA practice regarding other payment tokens, highly unlikely.

6 CONCLUSION

Based on our analysis, the applicability of Swiss financial market regulation to the Project is as follows:

Token qualification: The TZBTC qualifies as a pure payment token and not as a security.

Banking Act: The Keyholders do not accept deposits in the sense of the BA to the extent that none has sole power to dispose the Bitcoin and/or TZBTC. As this is the case in the m-out-of-n multi-signature setup, the Keyholders are not subject to the BA. Also, the Gatekeepers and the Association are outside of the scope of the BA.

AMLA / KYC: Both the Keyholders and the Gatekeepers are subject to the AMLA. The Gatekeepers are required to be (and maintain their status as) financial intermediaries in the sense of the AMLA. The Gatekeepers further will have to fulfil the KYC obligation on behalf of the Keyholders.

SESTA: As the TZBTC does not qualify as a security, the parties dealing with the TZBTC are outside of the scope of the SESTA.

7 LEGAL QUALIFICATIONS

This Memorandum is subject to the following qualifications:

- The analysis and conclusions in this Memorandum are based on our current understanding of the facts.
- The analysis and conclusions in this Memorandum are based on our current understanding and interpretation of the applicable Swiss regulations. Changes or extensions in the law may result in the need for a reassessment.
- This Memorandum is solely addressed to its named addressees for their own benefit and may be relied upon only by such named addressees and not by any other person or for any other purpose.
- This Memorandum shall be governed by and construed in accordance with Swiss law and the Commercial Court of the Canton of Zurich shall have exclusive jurisdiction in case of any dispute.

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