



BLOCKCHAIN
TASKFORCE

Position paper on the legal classification of ICOs

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Introduction

The reliable and easy transfer of assets to the Blockchain is a key prerequisite for the economic exploitation and development of new technologies. Asset transfer currently occurs through the use and transfer of tokens. Legally, however, there are still uncertainties regarding this mechanism which make the commercial implementation of blockchain projects more difficult.

The present position paper attends to the open central legal issues. It deals with the civil law transfer of tokens, the handling of tokens under the Money Laundering Act and the classification of tokens in securities and banking law. First, the position paper contains an analysis of the status quo. The assessment of the qualification of tokens under applicable law is shared by the authors of the position paper. The authorship represents stakeholders from law and science. Second, the position paper makes recommendations for a possible further course of action. These recommendations address various levels, notably desirable industry initiatives and regulatory action.

The proposal focuses on the question of whether the transfer of tokens must be newly regulated by civil law. The conclusion the authors come to is twofold: First, it seems conceivable to interpret the applicable securities law in such a way that a purely electronic transfer of securities is already possible today. This view has judicially not yet been tested. Secondly, if the Task Force does not want to bear the risk of legal uncertainty, however, there is the possibility of adapting the existing Code of Obligations. This can be based on two levels: Either the purely digital transfer of uncertificated securities will be allowed by law. As an alternative, the revision may also preclude the requirement for the written form for the transfer of claims. Which path is chosen, is primarily a political decision.

Finally, to promote innovative projects at an early stage, the construction of a regulatory sandbox is proposed. Participation should depend on the code used, the idea to be implemented, the project team and other factors. That alleviates that the tokens in question are not considered to be securities within the meaning of the FMIA and are not subject to the provisions of the Banking Act.



I. Definitions

1. Distributed Ledger

A distributed ledger is a publicly accessible, decentralized database and consists of a (i) data structure and (ii) a protocol. The data structure records the relevant data and records how the stored data can be exchanged and reconciled.

2. Blockchain

The blockchain is a particular form of a distributed ledger and can be described as a distributed, decentralized, virtual register that records transactions on virtual or real assets. The data is stored not just on one but several networks. Transactions between parties can be recorded, logged and confirmed without the need for an intermediary (such as a bank). Thus, it allows the blockchain to switch from a central to a decentralized infrastructure that operates without an intermediary.

3. Initial Coin Offering

An Initial Coin Offering ("ICO") is a digitized method of raising capital where an organization spends tradable digital units (tokens) to finance a particular project or to further develop a project. Under the offer, the investor will receive a token in cryptocurrencies (e.g., Bitcoin) or legal currencies (also called "fiat currencies") as payment from the issuer.

4. Token

Tokens are digital units that are inserted directly on a blockchain and exist as part of a position of a database (usually publicly viewable) that documents the existence and transfer of the tokens.

Tokens can basically be divided into different categories. As there is no international, uniform categorization, this report is based on the categorization of FINMA, which distinguishes between three main categories. Since the issuers design the tokens differently, it is quite possible that a token has the criteria of several categories:



Types	Characteristics
Payment Token	Payment Tokens are digital value units. They do not give the owner any specific right. Payment tokens are not issued by a government agency, but they can be used as a private means of payment.
Utility Token	Utility tokens represent a right to use certain services or digital uses that can be provided primarily on the blockchain.
Investment Token	Investment tokens may include assets such as claims on dividends, interest payments or shares in a company, income, etc., or include membership rights. Investment tokens are similar to stocks, bonds or other derivative financial instruments.

5. Securities Concept

According to Art. 2 Bst. b FMIA securities are standardized certificated and uncertificated securities, derivatives and intermediated securities, which are suitable for mass trading. Art. 2 par. 1 FMIO specifies that the securities are deemed to be unified and suitable for mass trading if they are offered to the public "in the same structure and denomination or are placed with more than 20 clients, insofar as they have not been created for individual counterparties". The provision thus essentially takes over the concept of the securities of Art. 2 SESTA. According to the message to the SESTA, this "comprises securities that have claims (bonds, debt instruments) and those that represent membership rights (shares, participation certificates and participation certificates)". Furthermore, registered creditor and membership rights in the form of uncertificated securities or intermediated securities also count as securities if they are standardized and suitable for mass trading.



II. Transfer of Tokens

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1. Current Situation

Tokens are issued directly on a blockchain and exist as digital units and part of a protocol in a (typically publicly accessible) database, which documents their existence and transfer. Issuers can configure the tokens differently; hence, they can represent a wide variety of content or rights.

If tokens contain a claim against the issuer (e.g. the right to use certain services), then claims under applicable Swiss law must be transferred by way of assignment in accordance with Art. 164 et seq. of the Swiss Code of Obligations ("CO"), provided the tokens are not securitized or issued as intermediated securities. Technically, there is legal issue arising from such a transfer because Swiss law requires a valid assignment to be in written form (Article 165 (1) and Article 973c (4) CO for the transfer of uncertificated securities).

In reality, however, the transfer of tokens takes place only on the blockchain and informally, meaning without the validity requirement of the written form. Therefore, despite the representation of a claim in a token, such claim cannot lawfully be transferred by a mere database entry on the blockchain. Although each, a physical signature or a qualified electronic signature, would meet the requirement of the written form, the written form is neither common nor practicable nor sensible when transferring tokens on a blockchain.

The above-mentioned issue could actually be solved by a revision of Art. 165 CO. The written form requirement for an assignment does not appear to be compelling, especially since other legal systems (such as German law) do without. However, a legislative proposal could face resistance from the consumer side; in any case, this option should be kept in mind from legal and political perspective, eventually with a waiver of the written form limited to e.g. digital transactions only).

Unless the above-mentioned written form requirement is met (as required for the transfer of tokens that represent a claim), the transfer of a token would be invalid, and thus the claim would not have been validly transferred to the purchaser. Therefore, the question to consider is whether tokens can be transferred in a form other than a written assignment. Possible solutions would be to (i) transfer tokens like securities, which requires that securities (*de lege lata*) can be issued in the form of a token, or (ii) qualify tokens as uncertificated securities and trigger a respective change in law (*de lege ferenda*).

The two alternatives are analyzed below. It proves necessary to discuss two topics in detail, namely first the qualification of tokens (as securities or uncertificated securities) and subsequently the transfer of tokens (in the form of securities or uncertificated securities or in another form).



2. Qualification of Tokens

2.1 Qualification of Tokens as Securities

a. Securities Concept

According to Art. 965 CO, a security is any certificate to which a right is linked in such a way that it can neither be claimed nor transferred without the certificate. Thus, in order to be a security, there must be (i) a certificate, (ii) which securitizes a claim, and (iii) that link between claim and certificate must be as narrow as to not entitle to the claim without the certificate.

b. Criteria for the Qualification of Securities

aa. Certificate

According to MEIER-HAYOZ / VON DER CRONE, a certificate is, in private law terms, a written document containing a declaration with private law relevance (MEIER-HAYOZ ARTHUR / VON DER CRONE HANS CASPAR, Wertpapierrecht, 3rd ed., Berne 2018, Chapter 1, N 6). A certificate thus consists of (i) a declaration bearer and (ii) a declaration of intent associated therewith. A certificate typically consists of a piece of "paper". With respect to so-called "electronic certificates", some legal scholars are of the view that a certificate does not necessarily have to be in paper form, but that any "material" on which declarations can be attached is considered appropriate certificate substance, irrespective of a form. HANDSCHIN correctly states: "This bearer of the declaration is typically, but not necessarily, an autonomous item made of paper or a similar material" (HANDSCHIN LUKAS, Papierlose Wertpapiere, Diss. Basel, Basel 1987, p. 11). A certificate is thus a bearer for a sign, i.e., the securement of information for later retrieval; the substance of the declaration bearer seems to be irrelevant, e.g., also in criminal law.

Further, some legal scholars are of the opinion that securities are not subject to the simple written form requirement according to Art. 12 et seq. CO, but rather to the principle of form freedom according to Art. 11 (1) CO. Whether the signature constitutes a validity requirement for a security is thus dependent on the right to be securitized (e.g., Art. 622 (5), 1096 (7), 1100 (6), 1153 (1) CO). Consequently, a certificate does not necessarily have to have a written form. The certificate should: (i) be able to record a statement, (ii) be accessible to a designated group of persons, and (iii) have a certain durability, even if the declaration bearer and the declaration of intent are not necessarily inseparable. If these criteria are met by an electronic data carrier, it can qualify as an electronic certificate pursuant to art. 965 CO. However, the use of electronic data carriers as a certificate is excluded if the signature is a validity requirement and the signature cannot be attached by an electronic signature (for example in the corresponding smart contract). An exception applies in cases where a facsimile signature is customary (art. 14 (2) CO) and it can be technically attached.

In a next step, the question arises as to whether a token, respectively a token in connection with its underlying publicly accessible database on a blockchain and the private key, can be considered a certificate pursuant to art. 965 CO. For this, it is necessary that a token comprises a declaration bearer and a declaration of intent associated therewith. Along with a publicly accessible database which has a definable collection of data on a blockchain, a token can qualify as a kind of declaration bearer if the token contains a hash value (as the case may be in connection with a smart contract) that is visible to all network participants concerned and



unambiguously refers to the declaration of intent underlying the issue of the token, which is typically included in a (conventional) document (e.g., white paper).

A token respectively a publicly accessible database on a blockchain is indeed a new technology that is not physical, such as a CD, however, tokens in connection with a publicly accessible database and the necessary technical means are suitable to record a declaration. This declaration in a token is then permanently linked to its underlying publicly accessible database on a blockchain. The content of the declaration can be accessed by anyone at any time on the respective blockchain. However, only the owner of a private key remains entitled to the token. Blockchain technology also ensures that the data is immutably stored, respectively that any changes are visible and traceable.

Accordingly, there are good reasons why a blockchain can fulfil the same functions as an electronic data carrier or a conventional paper certificate. According to this view, a token in connection with the underlying publicly accessible database on a blockchain and the private key can fulfill the requirements of a certificate pursuant to art. 965 CO, at least provided that the right underlying the token does not require the written form and neither an electronic nor a facsimile signature can be attached.

bb. Securitized Right

Basically, there are three categories of rights that can be securitized in a security: (i) claims, (ii) membership rights and (iii) real rights (rights in rem).

Due to its shapeable characteristics, each token must be qualified on a case-by-case basis. However, most tokens include a claim as they give the token holder a claim against the token issuer. Such entitlements are mainly included in utility tokens (e.g., right to access a particular platform) and asset tokens (e.g., right to dividends). If tokens comprise certain claims, these can be securitized in a security. It is not possible to shape payment tokens in form of securities – i.e. units of mere "crypto currencies" and thus not legally recognized, but factually usable means of payment. Payment tokens do not entitle the token holder to any claims against the issuer.

cc. Connection between Right and Certificate

In addition, the certificate has to be linked with the right in such a way that the right cannot be exercised without the certificate. This is ensured by means of a certificate clause. There are five different types: (i) simple presentation clause, (ii) simple legitimation clause, (iii) simple security clause, (iv) order clause, and (v) holder clause.

There are three categories of securities: registered securities¹, instruments to order and bearer securities. A security is deemed to be a bearer security if the wording or the form of the certificate shows that the current bearer is recognized as the beneficiary (Article 978 CO).

With respect to the question of whether tokens are qualified as one of the three types of securities, it can be stated that the certificate consists of a combination between the token, the information stored in the publicly accessible database on a blockchain and the private key. A token is a bearer security, if the right is securitized in such a way that the bearer and only the

¹ Art. 967 (2) CO requires a written declaration for the transfer of registered securities. Thus, the qualification of tokens as registered securities is unfavorable given the transfer of tokens representing registered securities would require written form.



bearer of the token (together with the private key) is entitled to request performance. Therefore, the obligated party is only able to perform to the bearer with discharging effect. The form of the certificate, i.e. the token stored in the publicly accessible database on a blockchain in connection with the private key, evidences that the respective owner of the private key is recognized as the entitled party (see Article 978 (1) CO). Only the owner of a private key can claim the right securitized within the token. The token (along with the private key and the distributed ledger on the blockchain) contains a bearer clause as the owner of the private key is entitled to claim the right by merely presenting the token and the private key.

dd. Interim Conclusion

Since only the bearer of the private key can control the token like the bearer of a classic "security", based on a teleological interpretation, there are good reasons to qualify a token as a security pursuant to art. 965 CO. Given the absence of court practice with this respect, however, there is (still) no legal certainty.

2.2 Qualification of Tokens as Uncertificated Securities

a. Concept of Uncertificated Securities

As an alternative to securities, uncertificated securities are uncertificated rights with the same function as securities (Article 973c (1) CO).

b. Criteria for Qualifying Uncertificated Securities

In order to issue uncertificated securities, the following conditions must be met: i) authorization by the issuer, ii) rights with the same function as securities and iii) entry in the book of uncertificated securities.

aa. Authorization by the Issuer

The issue of uncertificated securities requires an authorization or a consent of the bailor - either in the terms of issue or in the articles of association of the company (Article 973c (1) CO). The terms of issue (borrowing terms) may be construed as a summary of all the relevant terms of issue (such as amount, maturity, interest rate, etc.) based on which the issuer concludes independent stand-alone contracts with a large number of lenders. If membership rights are involved, an authorization is required in the articles of association of the company. If, on the other hand, there is a consent of the parties entitled to the uncertificated security (as bailor), uncertificated securities can be issued based on such consent of the entitled party.

The token issuer may further specify the terms of issue of his tokens in the "token terms" (usually published in a white paper, prospectus or even separately). These token terms comprise all essential terms of the tokens. If the token issuer issues such token terms, there is an authorization in the terms of issue, unless it is related to membership rights.



bb. Rights with the same Function as Securities

Uncertificated securities may be defined as rights that are issued in a large number and are generically identical based on a common legal basis (e.g. articles of association or terms of issue).

Tokens are issued in a large number, they are generically identical and have similar characteristics (e.g., same debtor, same rights, same denomination). Hence, the person who acquired the uncertificated security is irrelevant. For the rights contained in uncertificated securities, reference is made to the explanations related to the securitized rights (see above III.2.1.b.bb).

cc. Book of Uncertificated Securities

According to art. 973c (3) CO, uncertificated securities are created on entry in the book of uncertificated securities (constitutive effect), which is administered by the issuer (Art. 973c (2) CO). In the book of uncertificated securities, the issuer keeps book of the number and denomination of the issued uncertificated securities and of the creditors. For this purpose, an electronic bookkeeping of the uncertificated securities is sufficient.

Tokens are generated on a blockchain, which e.g. does not only register ownership rights in a distributed ledger, but also token transactions. Since the book of uncertificated securities can also be administered electronically, a blockchain can be considered a book of uncertificated securities. Thus, tokens representing uncertificated securities are generated on their entry on a blockchain.

dd. Interim Conclusion

The rights established in the token issue can be qualified as uncertificated securities pursuant to art. 973c (1) CO; in its ICO guideline of 16 February 2018, FINMA follows the same line of thinking. Unlike securities, uncertificated securities lack the connection to a certificate, which is why the uncertificated security is separate from the token and can be separately transferred. This is in contradiction to the practice as a token, similarly to a security, is aimed to fulfil a function of legitimation and transferability with respect to the underlying right.

2.3 Summary

Tokens intended to convey relative rights can thus be shaped and issued in the form of securities (based on a teleological interpretation under current law) as well as of uncertificated securities. In practice, what is usually issued are uncertificated securities. Ultimately, it depends on the intention of the issuer whether he wants to issue tokens in the form of securities.

3. Transfer of Tokens

3.1 Transfer of ("Digital") Securities

The transfer of securities is governed by the rules of property law (art. 922 et seq. of the Swiss Civil Code ("CC")). The transfer of the securitized right takes place not by assignment but by transfer of possession of the certificate itself (Art. 967 CO).



A transfer of possession is necessary because only the bearer of the certificate can claim the securitized right. The transfer is governed by art. 922 CC, but there are in general also other transfer options applicable for securities.

a. Transfer of Title

According to art. 922 CC, title is transferred by handing over the item itself as well as by the conclusion of a valid transfer contract (art. 922 CC as well as art. 967 (1) and (2) CO). The transfer of possession must meet the following conditions: (i) the transferor must be the immediate possessor of the item, (ii) the factual control must be transferred to the transferee and (iii) the both parties must have the willingness to transfer the item. In the case of bearer securities, no special formalities apply to the transfer agreement.

The determination of the meaning of the "transfer criterion" pursuant to art. 922 CC in connection with art. 967 CO has to occur in accordance with generally accepted interpretative methods. From the outset, two traditional methods of interpretation, namely grammatical and historical interpretation, are not applicable against the background of a new technological phenomenon e.g. the token. Therefore, the teleological elements of interpretation that question the meaning of a norm are paramount. The Federal Supreme Court is regularly committed to method pluralism, i.e. to a case-by-case application of those interpretation elements that give access to the proper meaning and content of a norm.

Tokens are ultimately digital data. Due to lack of physicality tokens do not qualify as physical item and therefore cannot be physically transferred. Therefore, it is largely uncontested in legal doctrine that the traditional transfer of title is not applicable to the transfer of tokens. However, it remains to be analyzed whether the above-mentioned acknowledgment of digital securities (see II.2.1 above) can influence the assessment from a property law point of view.

Following the understanding that certificates can also have digital shape, a digital transfer should be possible, even if the transfer does not take place physically. Against the background of the technical developments in recent years and based on a teleological interpretation, the transfer of title pursuant to art. 922 CC should also allow for a valid transfer via digital means. This is because it ultimately fulfills – with exception of the physical transfer (which incidentally is already considered fulfilled under current law when the removal permission of the item is given) – each criterion of a valid transfer: The token issuer and token buyer (or the token sellers and the token buyers) conclude a contract (e.g. purchase agreement) in which a clear intention for a transfer of title of the token is expressed. In addition, the factual authority is transferred to the purchaser by the fact that the owner of the token or the private key has the actual power over a token, as required by art. 919. (1) CC.

b. Transfer of Title by Way of Instruction

In special cases provided by law, the transfer of title mentioned above is not a requirement of a lawful transfer (so-called transfer surrogates, Art. 924 (1) CC). Such a legal transfer surrogate is the transfer of title by way of instruction. The transfer of title by way of instruction does not transfer the immediate possession, but the indirect possession. The immediate possessor remains the third party that holds the item.

In order for a transfer of title to happen by way of instruction, (i) there must already be staged possession, (ii) ownership of and control over the item must be with the possessor (and not



with a possessor's agent), and (iii) there must be an agreement between the seller and the purchaser (agreement on the transfer of title by way of instruction) based on which the third party (as immediate possessor) exercises possession on behalf of the purchaser.

The transfer of title is triggered by a mere agreement between the seller and the purchaser. The written form, which is problematic for a token transfer, is not required for such an agreement. This transfer of title has only effect vis-à-vis the third party once the third party has been notified by the seller. This means that the third party does no longer exercise possession for the seller, but for the purchaser. The legal relationship between the third party and the purchaser continues to be the original one between the immediate possessor and the seller.

A staged possession exists when the item is in the custody of a third party holding the item as the immediate possessor (e.g. tenant-landlord). The immediate possessor is a person who can directly exercise factual authority over an item (i.e. without intermediary). If the possessor transfers the exercise of the factual authority to a third party, he becomes an indirect possessor.

If a token buyer purchases a token, the token issuer will transfer the token on the blockchain directly in the token buyer's wallet. His possession of the token is – provided the token has been lawfully transferred – autonomous and immediate. The factual direct authority is only with him and only the token buyer, being the owner of the private key, has access to the token. Thus, he can act directly and without an intermediary. Therefore, there would be no staged possession and a valid transfer of title by way of instruction would not be possible.

However, if necessary, staged possession can be assumed if the token remains with the token issuer and the token is not transferred to the token buyer (e.g. based on a specific agreement). In such a setting, the token buyer would be the indirect possessor and the token issuer the immediate possessor. By mere agreement, which does not need to be in writing, the possession of a token could be transferred from the token issuer to the buyer. The indirect possession would pass from the previous token owner to the buyer. The token issuer remains the dependent, immediate possessor and would now have possession for the buyer. The staged possession would thus continue to exist after the transfer of the indirect possession of a token.

However, in this relationship, it is necessary that the token issuer has possession of the token and not only acts as a possession agent. However, this would be regularly the case if the token issuer would hold the token for the token buyer because the token issuer would depend on the instructions of the token buyer. He would thus only be a possession agent. Therefore, the legal institution of the transfer of title by way of instruction, which has the advantage to have effect without the written form requirement, would not be applicable to most token transfer transactions.

c. Interim Conclusion

Following the understanding that securities can also be shaped digitally, the digital transfer should also be possible, and this as a special type of transfer of title. On the other hand, the transfer of title by way of instruction would only be applicable in rare cases. Legal certainty is missing so far due to the lack of court practice.



3.2 Transfer of Uncertificated Securities

The problem with the qualification of tokens as uncertificated securities lies in the transfer thereof. According to art. 973c (4) CO, the transfer of uncertificated securities requires a written assignment declaration. Hence, for a lawful transfer of tokens - which are issued in the form of uncertificated securities - either art. 165 CO should be revised (see above III.1) or the scope of the transfer provisions should be extended as to allow transfers for digitally transferable uncertificated securities in a form-free manner. Such an extension of the scope would also require a change of law; a concrete proposal is formulated below.

Martin Hess and Stephanie Lienhard (Übertragung von Vermögenswerten auf der Blockchain, in: Jusletter of 4 December 2017) have submitted (and substantiated in detail) a proposal - based on the change in securities law initiated by the Federal Act on Intermediated Securities (Bucheffektengesetz, "BEG") - which was published and based on the idea that, following the de-materialization of the security by the uncertificated security pursuant to art. 973c CO, also the digitization by tokens could be covered by law with a new art. 973d CO.

The authors are of the opinion that Hess / Lienhard's appropriate proposal should be formulated in more "technology-neutral" terms as to comprehensively cover – to the extent possible – any future developments in the area of bitcoin, protocols, distributed ledgers, and tokens etc. without requiring yet another law change. Such a new legislative provision, which would be incorporated in the CO as article 973d, could have the following wording:

- 1 *The debtor may issue fungible rights in a digitally transferable form having the same function as uncertificated securities (as defined in art. 973c CO) or substitute digitally transferable securities with fungible securities or global certificates entrusted to a single custodian, provided that the conditions of issue or the articles of association of the company statutes for it, or the depositors have given their consent.*
- 2 *The debtor registers the number and denomination of the issued digitally transferable uncertificated securities and their creditors in a decentralized transaction ledger.*
- 3 *The digitally transferable uncertificated securities are created upon entry in the decentralized transaction ledger, provided independent expertise has checked and confirmed their functional reliability and compliance with the terms of issue or the articles of association of the company.*
- 4 *The disposition of digitally transferable uncertificated securities (transfer of title, granting of collateral with full legal rights or as a pledge) takes place through the transfer of the digitally transferable uncertificated securities in the decentralized transaction ledger.*
- 5 *The provisions of the Book-Entry Securities Act are applicable analogously.*

These terms cover all tokens that contain claims, membership rights and real rights (rights in rem) vs. an issuer, as well as asset tokens. This would allow what already is allowed within the regulatory framework under current law: The asset tokens could be transferred in a form-free manner pursuant to art. 24 BEG.

3.3 Transfer of Payment Tokens

Payment tokens do not provide specific rights to the token holder and are therefore neither securities nor uncertificated securities. The same applies to those utility tokens which, due to a decentralized infrastructure, do not constitute relative rights due to a lack of a counterparty.



Cryptocurrencies and, thus, also payment tokens are generally not recognized as legal currencies. However, the development and use of private means of payment do not violate Swiss currency law. Under civil law, private means of payment, such as payment tokens, can be stipulated to be acceptable means of payment, as exemplified by the WIR money in circulation for over 80 years. The only requirement is that the parties accept payment tokens as a means of payment. The provisions of the Code of Obligations are applicable for the stipulation of payment tokens.

However, the question also arises with regard to payment tokens as to how they can be lawfully transferred. In order for the debtor to fulfill his debt, title on a payment token must be lawfully transferred, i.e. as in the case of a purchase agreement, ownership on the stipulated private means of payment must be transferred. This transfer is governed by the aforementioned principles of property law of art. 922 sseq. CC (see above III.3.1.a). Payment tokens should therefore also be lawfully transferred to the creditor by a digital transfer in the sense of the aforementioned considerations.

3.4 Other Transfer Options

a. Transfer by Way of Assignment

If tokens contain a claim against the issuer, the claims under applicable Swiss law must in principle be transferred by way of an intermediated securities (for further details and description of such related problems see front part III 1.). The assignment, as mentioned, can only achieve practicability if art. 165 CO were revised.

b. Transfer by Way of Contract Transfer

Another legal option would be to transfer the entire contract instead of a single token. Swiss law namely allows not only to transfer specific claims, but also contracts as a whole. This means that the transfer of the original contract between the token issuer and the original token holder takes place by way of a new contract between the two original parties and a third party, i.e. the new token holder.

The token holder transfers all rights and obligations under the original contract to a third party. After the transfer, the third party becomes the contractual party and replaces the previous token holder. All involved parties must agree to this transfer in order for the transfer to be valid. The contract relating to the transfer of the original contract is subject to the same formal conditions as the original contract. As a result, unless there are formalities required for the original contract, the contract does not need to be in writing. Since the transfer of a contract, unlike the assignment of claims, does not require any written form, the contract transfer can occur in a form-free manner. In particular, given that a party is in a position to give its consent to the transfer of a contract in advance, the token issuer can already consent to the transfer of tokens (or the token contract) when issuing the tokens. However, it should be noted that the issuer participating to a contract transfer is impracticable if the transfer is made via a trading platform. A permanent offer in the general terms and conditions for the transfer to any third party is disputed by the scholars and causes in practice also difficulties due to the global adoption of general terms and conditions.



c. Transfer through Creation of Intermediated Securities

Another way to transfer tokens in a form-free manner is to issue tokens as intermediated securities. In this case, tokens would need to be deposited as securities or uncertificated securities with a custodian or registered in its main register and credit the respective rights to a securities account (article 6 (1) BEG). The disposition of intermediated securities takes place by means of an instruction of the seller (art. 24 BEG), which is not subject to any formal requirements.

The creation of tokens as intermediated securities, however, is hampered by the requirement of the central custodian. According to art. 4 BEG, securities accounts can only be managed by one custodian. The provision in art. 4 BEG is final, in accordance with the will of the legislator. Article 4 (2) BEG, therefore, provides for a final list of domestic financial intermediaries which may act as custodian, and Article 4 (3) BEG contains a provision concerning foreign financial intermediaries.

Even without an in-depth analysis, the issuers of tokens or the "operators" of a blockchain protocol (e.g. Ethereum) cannot act as a bank (lit. a), securities dealer (lit. b), fund management company (lit. c), Swiss National Bank (e) or the Swiss Post (f). At best, the central securities depositories (lit. d) could be considered under art. 61 FMIA. However, with this respect, at most only the "operator" of a blockchain protocol could be eligible, such as e.g. the Ethereum Foundation, which could be considered the operator of a central depository (i.e. an institution that centrally manages securities and other financial instruments based on common rules and procedures). However, this option is not applicable as the blockchain (or blockchain protocol) is a decentralized ledger or registry that is precisely not administered by a central agency.

d. Transfer by Way of Instruction

Furthermore, payment tokens, as already done for cashless payments, could be transferred by way of instruction, which is generally valid in form-free manner (pursuant to art. 466 sseq. CO). However, the traditional legal framework governing instructions does not fit well with the token transfer characteristics, in particular, a revocation (art. 470 CO) is technically impossible.

4. Recommendations

Recommendation 1: Transfer of Tokens without Change of Law

Based on various doctrines on the electronic shape of certificates, it can be argued that the existing law does not preclude the purely digital transfer of tokens, provided that they are shaped as electronic securities and kept in a decentralized transaction ledger. In order to achieve this result, art. 922 CC has to be interpreted broadly: in addition to a physical transfer, also a digital transfer should lead to the transfer of title on a certificate.

For practical and economic reasons, such an interpretation seems to be welcome. This will help to support new, eligible technologies in legal doctrine and embed them in existing legal institutions. In the case of a broad recognition of this interpretation by legal scholars and practitioners, a change in the law would be redundant and the associated loss of time could be avoided.



It should not be overlooked, however, that, at present, we lack of court practice on the central legal issues and, therefore, these interpretations of the current law, as well as all others, are subject to the disadvantage of legal uncertainty. If the respective risks are to be excluded, the only solution is a change in the law in the sense of Recommendation 2.

Recommendation 2: Transfer of Tokens with Change of Law

A change in the law can be made on three passages of the Swiss Code of Obligations:

- **Option 1:** One approach could be, on the one hand, a revision of art. 165 CO, according to which the assignment of claims no longer needs to be in written form,. This option brings blockchain projects the greatest freedom: transactions need only to be slightly adapted to the legal framework but tie directly to the technological advantages of blockchain. However, the assignment rules are by far not just relevant in blockchain transactions. In particular, in the collection procedure against consumers, the assignment of claims in written form still plays a role. It would, therefore, be associated with considerable political effort to enforce this option. If necessary, such concerns could be taken into account with a revision of art. 165 CO, providing for the elimination of the written form requirement only for certain digital business models. Thus, the existing wording of article 165 (1) CO could be amended to exclude digitally transferred claims from the requirement of a written form. For the sake of completeness, it should be noted that in international transport law, similar considerations are being made with respect to electronic documents establishing title to goods as to introduce functional equivalence rules (for example, in the UNCITRAL Model Law on Electronic Transferable Records of 2017).
- **Option 2:** On the other hand, the described legal risks can be eliminated through an amendment in securities law. The insertion of a new art. 973d CO allows purely digital transfer of fungible rights, provided that they are kept on a digital and decentralized transaction ledger. This proposal openly addresses the essential needs of the blockchain community and represents only a relatively minor intervention into the regulatory landscape.
- **Option 3:** Finally, as a middle ground, it would also be possible to delete the requirement of a written form from art. 973c CO. In this option, all uncertificated securities, even those not kept in a decentralized transaction ledger, could transfer in a form-free manner. The downside to this change in the law is that not all tokens issued in practice qualify as uncertificated securities. Therefore, albeit simple, a legal structuring of the transactions would be required to achieve the desired results. In addition, areas other than the blockchain would also be affected, hence, the political acceptance of such a proposal cannot be easily evaluated.

The advantages and disadvantages of the options described are less of legal, but rather of political nature. Therefore, the authors of the position paper do not comment on the prioritization of the options and recommend to the task force to hand over the option in the present form to the authorities without proposing any prioritization.



III. Application of the Anti-Money Laundering Act (AMLA) on Tokens

Authors: Cornelia Stengel, Andreas Glarner

1. Payment Tokens

1.1 Applicability of the AMLA

In its guidelines, FINMA qualifies certain tokens as payment tokens and their issuing as an “issuing of means of payment” (Herausgabe eines Zahlungsmittels), subject to supervision (Art. 2 para. 3 lit. b AMLA).

In assessing the applicability of the AMLA, however, it should be noted that not certain means of payment as such are subject to the AMLA, but rather persons (natural and legal) who carry out a specific financial intermediary activity. This activity may include, among other things, accept or hold on deposit assets belonging to others or assist in the investment or transfer of such assets on a professional basis (Art. 2 para. 3 lit. b AMLA). Likewise, a financial intermediary activity exists, for example, when non-cash means of payment are issued or managed and the contracting party thereby makes payments to third parties (Art. 4 para. 1 lit. b AMLO). Accordingly, the AMLA lacks a clear definition of the term “means of payment”. The legislative understanding of the term is only described as an example by listing credit cards and travelers’ cheques as examples of means of payment in accordance with the AMLA.

It is therefore not a payment token per se or its mere issuance that is subject to AML regulations, but, possibly a financial intermediary activity in connection therewith. Such financial intermediary activity may be present if a payment token is issued, as FINMA describes in its guidelines. But not every issuance of a payment token also also qualifies as a financial intermediary activity and is thus subject to subordination.

In the conventional forms of issuing means of payment (i.e., for example, credit cards and travelers' cheques), the financial intermediary activity subject to AML regulations consists of accepting assets and passing them on to third parties as part of the settlement of a payment. Accordingly, the issuing of means of payment is only subject to subordination under the AMLA if it is carried out by an issuing office that is not identical to the users of the means of payment, i.e. if (at least) a tripartite relationship exists (see FINMA RS 2011/01, para. 64).

According to the opinion of the authors, the issuing of a payment token based on the current anti money laundering legislation is therefore not already subject to the AMLA by the mere issuance of payment tokens, but only in those cases in which the issuer of a payment token carries out financial intermediary activities, in other words accepts assets and transfers them to third parties (who have accepted the token as payment) for the purpose of processing the payment or the settlement or are otherwise involved in transactions between third parties in connection with the payment token. Against this background, when issuing payment tokens, one must distinguish between two types:

- Issuing of payment tokens with financial intermediary (FI) - Activities of the issuer (subject to supervision): e.g. Crypto CHF according to Fintechrockers;
- Issuing of payment tokens without FI activity of the issuer (not subject to supervision): e.g. Bitcoin, Ether.



In connection with the question of the applicability of the AMLA, reference should also be made to a statutory exception which FINMA expressly mentions in its guidelines: The issuing of utility tokens with an ancillary purpose for payment is not subject to the AMLA because its payment function is accessory to the main function. However, according to FINMA's guidelines, this only applies if the main function of the token fulfills a purpose outside the financial area. In addition, the other requirements of the Circular, referenced in the guidelines (FINMA Circular 11/1, margin no. 13 et seq.), must also be fulfilled.

1.2 Development Stages of Payment Tokens

The FINMA guidelines not only differentiate between different classes of tokens but also between different stages of development within these classes. The following stages are distinguished: pre-financing, pre-sale, pre-functional tokens and functional tokens. The following section explains the influence of these stages of development on the possible applicability of the AMLA.

a. Pre-Financing

In the case of pre-financing, no token exists at the time the funds are raised. The investors are promised that the blockchain or tokens will be developed and that they will receive these tokens at the given time, resp. that the project developers implement an appropriate allocation proposal in the Genesis code of the Blockchain protocol to be published. This is a kind of «early stage project financing».

- No issuing of a means of payment because no tokens exist yet.
- No bank approval required because there are no (repayment) claims against the issuers.
- **No financial intermediary activity of the issuer**, therefore the AMLA is not applicable

b. Pre-Sale («Voucher-Token»)

In the case of a pre-sale, the investors will receive a Token A, combined with the option to convert it into a Token B or acquire Token B at a later date. Token B does not exist yet, but is being developed. A repayment obligation is excluded.

- No issuing of a means of payment, because no payment token exist yet, but it must first be created.
- No bank approval required because there are no (repayment) claims against the issuers.
- **No financial intermediary activity of the issuer**, therefore the AMLA is not applicable

c. Issuing of Pre-Functional Tokens

Token B is issued directly, but it does not yet function as a means of payment, because there are no "points of acceptance" yet, or the planned system in which the token is to be accepted as a means of payment has yet to be developed. A repayment obligation is excluded.



- Issuing of a means of payment, because the issuers intend to have acceptance points for the token in the future and the token could already be used accordingly.
- No bank approval required because there are no (repayment) claims against the issuers.
- **Possible financial intermediary activities of issuers**, with which the applicability of the AMLA must be examined in more detail.

d. Functional Token

The fully functional payment token is issued within the ICO/TGE.

- Issuing of a means of payment, because the token could already be used accordingly.
- No bank approval required because there are no (repayment) claims against the issuers.
- **Possible financial intermediary activity of the issuer**, with which the applicability of the AMLA must be examined in more detail.

e. After Pre-Financing ICO/TGE takes Place

When converting a voucher token issued as part of a pre-sale (token A) into a token B or when issuing a token, resp. specifying the respective allocation proposal in the code of the Genesis block of a protocol in accordance with a contractual agreement (pre-financing), the provisions on the change from non-commercial into a commercial activity of financial intermediaries could be applied analogously (especially Art. 11 AMLO).

In summary, these rules state that in such scenario the financial intermediary must immediately comply with the due diligence obligations set forth by the AMLA and submit an application for affiliation to an SRO or an application to FINMA (subordination as DUFI) for the professional execution of the activity within two months. Until they join an SRO or are subject to DUFI supervision, these financial intermediaries are prohibited from acting as financial intermediaries beyond what is absolutely necessary to preserve their assets.

In this case, these provisions apply analogously, i.e. at the time of the conversion of Token A into Token B, or at the time of the allocation of a token announced as part of a pre-sale, the question of a subordination is to be examined and due diligence requirements (see below, IV.1.5) must be observed.

1.3 Secondary Market

If payment tokens are traded on the secondary market, the following constellations must be distinguished:

a. Two-Party Transaction (Exchange)

The purchase and sale of payment tokens against other cryptocurrencies or against legal/official currencies is qualified as a currency exchange.

Only the professional money exchange, i.e. exchange above certain thresholds, is subject to the AMLA and simpler due diligence obligations must be observed.



- A trading platform for payment tokens, which offers the mere allocation of purchase and sell offers without payment processing, does not conduct financial intermediation according to the AMLA.

b. Tripartite Business (Transmitting)

A transaction in which payment tokens are not exchanged between two persons but are passed on by a third person (transfer of assets) is to be classified as a money transfer.

This transfer is always considered professional, i.e. the thresholds do not apply and there is no relief in due diligence obligations.

- A trading platform for payment tokens, which handles payments on a professional basis, is subject to the AMLA, as the AMLA, unlike banking legislation, does not provide for an exemption for "settlement accounts".

1.4 AMLA Subordination

As stated above, the authors consider that the issuance of a payment token is only subject to the AMLA if the issuer not only distributes the token, but also performs a financial intermediary activity, i.e. is involved in some form in the settlement of payment transactions. If such a constellation exists, the issuer of the payment token is subject to AMLA subordination, i.e. he has the duty to join an SRO or to have himself supervised by FINMA as a DUFI.

According to the FINMA Guidelines, however, he can exempt himself from the obligation of subordination by accepting the assets and issuing the tokens with the assistance of a regulated financial intermediary. The latter ensures that the due diligence obligations (see below) are met when accepting the assets and, in particular, that the tokens are issued to correctly identified persons.

1.5 AMLA Due Diligence Obligations

a. General

An issuer of payment tokens, who also carries out financial intermediary activities, i.e. is involved in any form in the settlement of the payment transactions with the tokens, must comply with the following due diligence obligations:

1. Verification of the identity of the customer
2. Establishing the identity of the beneficial owner
3. Repetition of the verification of the identity of the customer or the establishment of the identity of the beneficial owner
4. Special duties of due diligence («risk-based approach»)
5. Duty to keep records
6. Organizational measures



b. Due Diligence 1-3

The due diligence obligations Nos. 1-3 of the issuer refer to its contractual partner (and in the case of non-listed legal entities and partnerships on its controller) and the beneficial owner of the assets, i.e. in the case of token issuance, to those persons to whom the issuer transfers the tokens and in return of which he receives assets. Subsequent token owners will not become the contractual partners of the issuer, even if the transfer of the token gives them a claim against the issuer, which the issuer can/must pay without examining the identity of the new assignee.

Insofar as the FINMA Guidelines, due to the lack of distinction between payment tokens with and payment tokens without financial intermediation, are interpreted that also the issuance of a payment token without financial intermediation is subject to AML regulations, the same due diligence obligations apply to the issuer: Always identified must be the contracting party, i.e. the person to whom the token is transferred and from whom assets are received. The determination of the controller and the beneficial owner always refers to this process.

c. Due Diligence 4

The risk-based approach applies to business relationships and transactions with increased risk. In this case, the token issuer can and must develop criteria that indicate business relationships with increased risks. The same applies to transactions between him and his contractual partner. However, the token issuer is not involved in the transactions between later token owners; there is no (further) financial intermediation, and the issuer, therefore, does not need to monitor these transactions between third parties. From the point of view of money laundering prevention, there is probably a regulatory gap here and it is to be discussed whether appropriate "best practices" should be developed in this respect.

d. Due Diligence 5-6

In that regard, no special features. A token issuer (like other financial intermediaries) prepares, organizes and retains its documentation in a way that provides a reasonable judgment on compliance with anti-money laundering and terrorist financing obligations within a reasonable period of time. He also takes the prescribed organizational measures, such as setting up a money laundering unit, instructions and training.

1.6 Special Features for Issuers of Means of Payment

- Waiver of due diligence obligations? Not possible because the exception catalog does not apply.
- Simplified due diligence obligations? Not possible because the exception catalog does not apply.



2. Utility Token

The utility token provides its recipient with access to a digital use or service provided on or using a blockchain infrastructure. As a rule, there is no payment function associated with it. As a result, the issuance of a pure utility token regularly does not involve any financial intermediary activities within the meaning of the AMLA.

If a utility token also has a payment function, it must be evaluated whether it is merely an accessory "ancillary function" that adds to a (main) utility function outside the financial area, or whether the payment function is also to be regarded as the main function. The issuance of utility tokens with an ancillary purpose for payment is not subject to the AMLA, provided that the main function of the token fulfills a purpose outside the financial area and the other requirements according to FINMA- Circ. 11/1, margin no. 13 ff. are complied with.

3. Asset Token

Asset tokens are treated as securities by FINMA in their guidelines. The issuance of tokens, which qualify as securities, is not subject to the AMLA. However, the trading of securities is subject to subordination (Art. 2 para. 3 lit. c AMLA).

4. Recommendations

Recommendation 3: No Adjustment of Anti Money Laundering Regulations

Under certain conditions, the rules of the AMLA are already applicable today to the issue and transfer of tokens. Based on the present interpretation, the obligations imposed on the financial intermediaries concerned are in principle justifiable. An amendment of the current law does not appear to be necessary.

Recommendation 4: Best Practices for Transaction Monitoring

In transactions between subsequent token owners, the token issuer is not involved. In the absence of financial intermediation, the issuer does not have to monitor these transactions between third parties and a regulatory gap arises. In order to increase confidence in Blockchain technology vis-à-vis the authorities and other participants in the financial market (especially banks), the creation of "best practice" rules for transaction monitoring after the initial issue of the tokens should be considered. Among other things, special due diligence obligations could be introduced; a risk-based approach should be followed.



IV. Application of FMIA and Banking Act on Tokens

Authors: Martin Hess, Mirjam Eggen

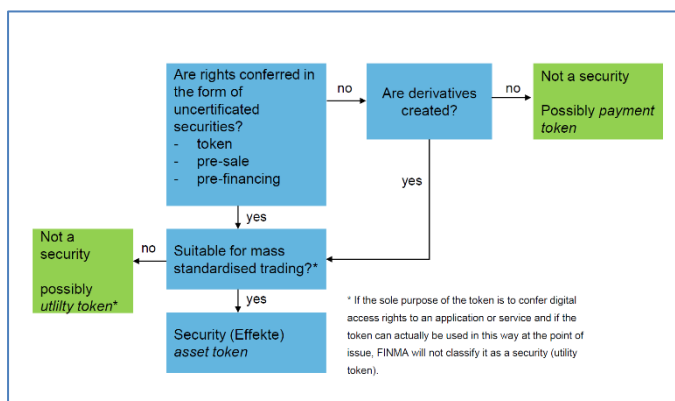
1. Token as Securities

1.1 FINMA Guidance

In its guidelines for enquiries regarding the regulatory framework for initial coin offerings (ICOs), dated 16 February 2018, FINMA issued the first clarification for when tokens qualify as securities. According to the communication, FINMA bases its assessment on the underlying economic purpose of an ICO and not on the classification used by the issuer. Payment and utility tokens are generally not considered as securities, whereas investment tokens are. FINMA notes that tokens can meet the criteria for more than one of these token categories. Such hybrid tokens must meet the regulatory requirements for all categories to which they belong.

The distinction between investment and utility tokens is difficult in practice. FINMA, therefore, makes it clear that utility tokens are also to be treated as securities if their economic function is part of an investment. This is not the case if the following conditions are met:

- The sole purpose of the token is to give the holder digital access to an application or service.
- The token can already be fully used as soon as it is issued.



Source: Slides FINMA ICO Roundtable, März 2018

If investment or utility tokens are used as capital market instruments, it is necessary to check whether the further requirements are met for securities to be available. In particular, negotiable securities or uncertificated securities, are only considered as securities if they are offered to the public «in the same structure and denomination or are placed with more than 20 clients», based on Art. 2 FMIO.

A pre-sale of tokens is basically the same as a regular ICO. However, if the tradability and assignability of the claims on the functional token is excluded, there is no financial instrument suitable for mass trading and the classification as securities is not possible.



1.2 Pre-Financing, Voucher Tokens and Pre-Functional Tokens

When developing blockchain projects, promoters often cannot wait with third-party funding until they have a mature and working application. They are therefore focusing on other ways to find sponsors through the Blockchain. The most important mode of these early forms of financing is the pre-financing or issuing of voucher tokens or pre-functional tokens. For the respective terms, reference may be made to the above-mentioned statements (IV.1.2). However, these forms of financing are not the only possible variants. The practice has developed a wide variety of forms of financing, some of which cannot be classified in the categories cited by FINMA. The classification of these different stages of development of tokens under the stock exchange law can hardly be made on a blanket and global basis. FINMA treats pre-financing and pre-sales basically like mature functional tokens. This means that the issued values are regarded as securities within the meaning of the FMIA, i.e. provided they are standardized and suitable for mass trading securities, bonds, derivatives or intermediated securities. Based on this, at least the following statements can be made:

- Voucher and pre-functional tokens that relate to investment and utility tokens are securities that meet the requirements of Art. 2 FMIO. This is especially the case if they are offered to the public «in the same structure and denomination or are placed with more than 20 clients».
- Pre-functional tokens, which will later be used as payment tokens, are not currently subsumed under the definition of securities according to FINMA. However, FINMA may deviate from this principle if the promoter commits to set up a functioning application for the token purchaser. If there is a secondary market for such pre-functional tokens prior to the finalization of the application, or if such a prospect is promised, they would be considered as having a securities character.
- Voucher tokens that can be exchanged for payment tokens are to be considered as securities if they fulfill the requirements of Art. 2 FMIO. If the holder of such tokens has an enforceable right to switch to a functional token, this would generally lead to the qualification of the token as security.
- If in the case of pre-financing or of the issuance of voucher or pre-functional tokens the trading and assignability of the claims on the functional token is excluded, then these instruments do not qualify as financial instruments suitable for mass trading and the quality of the securities is lacking.

However, a secure qualification of the different forms of financing cannot be carried out at the present time. A uniform classification of these facts by the legal profession could therefore clearly promote legal certainty in this area.

1.3 Legal Consequences

Qualifying tokens or earlier development stages of financing blockchain projects as securities currently has little impact on the primary market. The self-issuing of these instruments does not result in a duty of subordination according to the applicable financial market laws. Exceptions exist only for the following constellations:



- According to Art. 3 Para. 3 SESTO, derivative companies are required to be regulated as securities traders if, in a professional capacity, they create derivatives and offer them to the public on the primary market for their own account or for the account of third parties. This is relevant for tokens which qualify as derivatives according to the FMIA.
- Underwriting and offering tokens of third parties publicly on the primary market, is, if conducted in a professional capacity, a licensed activity (Art. 3 para. 2 SESTO) if the tokens in question qualify as securities.
- The issue of shares and bonds leads to a compulsory prospectus obligation. Especially in the case of international issues, the prospectus requirements of the jurisdictions concerned must always be taken into account. These requirements are considerably higher in Europe or the USA than in the applicable Swiss law.

Concerning secondary trading of tokens which qualify as securities the requirements for brokers and trading platforms (Article 3 (5) SESTO, Arts 26 ff. FMIA, Art. 42 ff. FMIA) must be taken into account. Depending on the circumstances, the provisions of Art. 142 f. FMIA on insider trading and market manipulation are to be complied with.

2. Token as Public Deposit

In the aforementioned ICO Guideline, FINMA has generally subsumed Pre-ICOs under the securities definition, at least in the table on page 7, which does not cover all possible facets. There are different types of pre-sales. In pre-sale, either tokens are sold before the ICO or claims are granted for future tokens. According to the current FINMA practice, this may be seen as a prohibited banking activity: receiving deposits from the public and promoting it. Public advertising and acting in commercial capacity within the meaning of Art. 6 and 7 Banking Ordinance are likely to be given within the framework of planned ICOs and related projects due to the internet presence. This holds the danger that the enforcement department of FINMA intervenes and requests information. Various ICOs attract third parties for marketing and sales. For the company performing the ICO, this may constitute improper advertising, and for the third party involved, an unauthorized distribution or underwriting activity.

3. Recommendations

The economic approach of FINMA means that a large part of the not yet fully functional tokens qualifies as securities according to Art. 2 FMIA. Against this background, we see the following need for action:

Recommendation 5: Creation of a Regulatory Token Map

The qualification of tokens as securities or deposits depends significantly on the stage in which the ICO is in (pre-financing, vouchers, pre-functional, functional tokens). As part of the planned token map, this temporal dimension should be taken into account. The map should show at what stage and under which conditions it can typically be assumed that tokens are securities within the meaning of the FMIA or deposits within the meaning of the Banking Act.



Recommendation 6: Regulatory Establishment of a Blockchain Sandbox

The current supervisory law is aimed at the regulation of centralized and established structures. This circumstance can have a restraining effect on the innovative power of the blockchain. If blockchain projects meet certain requirements, they should, therefore, be granted sandbox relief in the sense of a regulatory carve-out. In particular, the tokens in the scope of this carve-out would in principle not be governed by the provisions of FMIA, SESTA, and Banking Act. On the other hand, under the sandbox, the prospectus requirements of the forthcoming Financial Services Act, as well as the AMLA rules, should be observed. Possible conditions for participation in the sandbox can be:

Code	▪ Token Audit
Idea	▪ Comprehensibility and Realizability of Business Activity and Business Plan
Team	▪ Fit and Proper
User	▪ List of Interested Parties for the Offered Product
Funds	▪ Planned Allocation of Funds
Transparency	▪ According to the forthcoming Financial Services Act

The examination of these criteria can be done through a Technical Committee. This should be composed of established members of the Swiss Blockchain Community. It is conceivable that FINMA or another regulatory authority recognizes suitable panels as self-regulatory organizations.

As an alternative to the proposed model, a sandbox is conceivable which is not based on the specific project but is technology-neutral. All subscribers who do not exceed certain thresholds in terms of the number and volume of transactions made could participate in such a sandbox.



Recommendations

Recommendation 1: Transfer of Tokens without Change of Law

Based on various doctrines on the electronic shape of certificates, it can be argued that the existing law does not preclude the purely digital transfer of tokens, provided that they are shaped as electronic securities and kept in a decentralized transaction ledger. In order to achieve this result, art. 922 CC has to be interpreted broadly: in addition to a physical transfer, also a digital transfer should lead to the transfer of title on a certificate.

For practical and economic reasons, such an interpretation seems to be welcome. This will help to support new, eligible technologies in legal doctrine and embed them in existing legal institutions. In the case of a broad recognition of this interpretation by legal scholars and practitioners, a change in the law would be redundant and the associated loss of time could be avoided.

It should not be overlooked, however, that, at present, we lack of court practice on the central legal issues and, therefore, these interpretations of the current law, as well as all others, are subject to the disadvantage of legal uncertainty. If the respective risks are to be excluded, the only solution is a change in the law in the sense of Recommendation 2.

Recommendation 2: Transfer of Tokens with Change of Law

A change in the law can be made on three passages of the Swiss Code of Obligations:

- **Option 1:** One approach could be, on the one hand, a revision of art. 165 CO, according to which the assignment of claims no longer needs to be in written form. This option brings blockchain projects the greatest freedom: transactions need only to be slightly adapted to the legal framework but tie directly to the technological advantages of blockchain. However, the assignment rules are by far not just relevant in blockchain transactions. In particular, in the collection procedure against consumers, the assignment of claims in written form still plays a role. It would, therefore, be associated with considerable political effort to enforce this option. If necessary, such concerns could be taken into account with a revision of art. 165 CO, providing for the elimination of the written form requirement only for certain digital business models. Thus, the existing wording of article 165 (1) CO could be amended to exclude digitally transferred claims from the requirement of a written form. For the sake of completeness, it should be noted that in international transport law, similar considerations are being made with respect to electronic documents establishing title to goods as to introduce functional equivalence rules (for example, in the UNCITRAL Model Law on Electronic Transferable Records of 2017).
- **Option 2:** On the other hand, the described legal risks can be eliminated through an amendment in securities law. The insertion of a new art. 973d CO allows purely digital transfer of fungible rights, provided that they are kept on a digital and decentralized transaction ledger. This proposal openly addresses the essential needs of the blockchain community and represents only a relatively minor intervention into the regulatory landscape.
- **Option 3:** Finally, as a middle ground, it would also be possible to delete the requirement of a written form from art. 973c CO. In this option, all uncertificated securities, even



those not kept in a decentralized transaction ledger, could transfer in a form-free manner. The downside to this change in the law is that not all tokens issued in practice qualify as uncertificated securities. Therefore, albeit simple, a legal structuring of the transactions would be required to achieve the desired results. In addition, areas other than the blockchain would also be affected, hence, the political acceptance of such a proposal cannot be easily evaluated.

The advantages and disadvantages of the options described are less of legal, but rather of political nature. Therefore, the authors of the position paper do not comment on the prioritization of the options and recommend to the task force to hand over the option in the present form to the authorities without proposing any prioritization.

Recommendation 3: No Adjustment of Anti Money Laundering Regulations

Under certain conditions, the rules of the AMLA are already applicable today to the issue and transfer of tokens. Based on the present interpretation, the obligations imposed on the financial intermediaries concerned are in principle justifiable. An amendment of the current law does not appear to be necessary.

Recommendation 4: Best Practices for Transaction Monitoring

In transactions between subsequent token owners, the token issuer is not involved. In the absence of financial intermediation, the issuer does not have to monitor these transactions between third parties and a regulatory gap arises. In order to increase confidence in Blockchain technology vis-à-vis the authorities and other participants in the financial market (especially banks), the creation of "best practice" rules for transaction monitoring after the initial issue of the tokens should be considered. Among other things, special due diligence obligations could be introduced; a risk-based approach should be followed.

Recommendation 5: Creation of a Regulatory Token Map

The qualification of tokens as securities or deposits depends significantly on the stage in which the ICO is in (pre-financing, vouchers, pre-functional, functional tokens). As part of the planned token map, this temporal dimension should be taken into account. The map should show at what stage and under which conditions it can typically be assumed that tokens are securities within the meaning of the FMIA or deposits within the meaning of the Banking Act.

Recommendation 6: Regulatory Establishment of a Blockchain Sandbox

The current supervisory law is aimed at the regulation of centralized and established structures. This circumstance can have a restraining effect on the innovative power of the blockchain. If blockchain projects meet certain requirements, they should, therefore, be granted sandbox relief in the sense of a regulatory carve-out. In particular, the tokens in the scope of this carve-out would in principle not be governed by the provisions of FMIA, SESTA, and Banking Act. On the other hand, under the sandbox, the prospectus requirements of the forthcoming Financial Services Act, as well as the AMLA rules, should be observed.



Possible conditions for participation in the sandbox can be:

Code	▪ Token Audit
Idea	▪ Comprehensibility and Realizability of Business Activity and Business Plan
Team	▪ Fit and Proper
User	▪ List of Interested Parties for the Offered Product
Funds	▪ Planned Allocation of Funds
Transparency	▪ According to the forthcoming Financial Services Act

The examination of these criteria can be done through a Technical Committee. This should be composed of established members of the Swiss Blockchain Community. It is conceivable that FINMA or another regulatory authority recognizes suitable panels as self-regulatory organizations.

As an alternative to the proposed model, a sandbox is conceivable which is not based on the specific project but is technology-neutral. All subscribers who do not exceed certain thresholds in terms of the number and volume of transactions made could participate in such a sandbox.



BLOCKCHAIN
TASKFORCE

TOKEN MAP

Token Classification Framework

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Introduction

The main goal of the Token Map is to allow all major stakeholders (startups, enterprises, legal and other advisors, regulators and legislators, and finally investors) to design, discuss and understand various tokens for their respective needs. The token-based economy is still in its infancy, and business models, legal and technology terms as well as legislation are still rapidly evolving. The Token Map will therefore propose a set of criteria and terms to be used in the context of designing and evaluating blockchain-based projects that issue their own tokens. This document will need to be updated on a regular basis in order to keep pace with the industry and remain relevant to the major stakeholders.

Three-Faceted Approach

There have been multiple efforts in the past to catalogue and illustrate various types of tokens and group them in different categories. An attempt to display and categorize tokens on a single infographic or a table results in either an oversimplified view or quickly becomes too complex. There are currently more than 1500 various tokens supported on a dozen various blockchains and distributed ledger technology platforms, and the number of tokens and platforms is steadily growing.

It is, however, not just the sheer number of tokens that make the categorization effort difficult, it is also the continuous innovation in so-called “crypto or token economics” (“tokenomics”) mechanisms that are being invented and tried in order to incentivize the holders of a token to pursue a certain goal, (e.g. increase the monetary value of a network, participate in running the shared infrastructure, secure transactions, facilitate engagement with a content provider or an app, share personal information, finance an open source project and many others). There is no doubt that experimentation and innovation in this field will continue and will result in even more radical ideas and unique characteristics that future tokens and the underlying platforms will support. At the same time, it is possible to capture and analyze various dimensions (or characteristics) of a token depending on the point of view and the goals of a particular stakeholder. For our effort, we have decided to focus on the three major groups of stakeholders:

- **Startups/Developers and their Advisors**

This group is focused on designing their tokens, including selecting approaches to distribution and understanding legal and tax implications of their decisions. It is important for these stakeholders to capture and express the economic and utility function of their tokens.

- **Regulators/Legislators**

This group is focused on understanding how a particular token should be treated in the context of an existing set of laws. It is feasible that a gap in the legislation can be identified based on the original intent of the token designers and the new possibilities or ways of operation made possible by blockchain and distributed ledger technologies.

- **Investors/Advisors/Intermediaries**

This group is primarily focused on understanding the risks associated with acquiring, using or holding a particular token.



To cater to these groups and, at the same time, allow for continuous innovation we propose to use a three-faceted approach to token categorization and develop three types of inter-related maps: Token Design Map, Token Regulation Map and Token Investor Scoring Map.

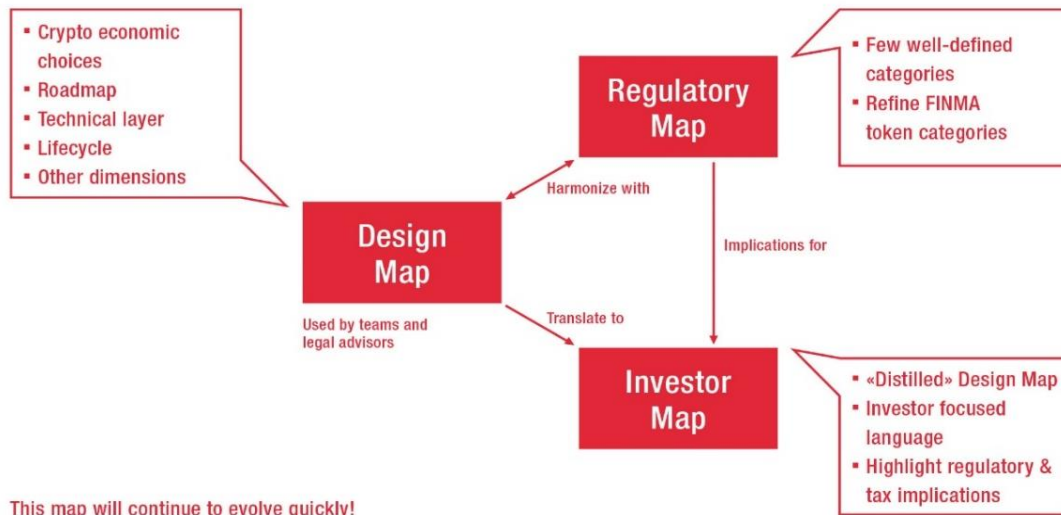


Figure 1: Token Map Three-Faceted Approach

Token Design Map

This map is targeted primarily for use by the startup teams that are in the process of designing their token or tokens and by their respective tax, legal and other types of advisors. It is important that this map allows one to clearly capture and explain the intent, value and utility of the token. To that end, we propose the following set of categories:

1. Token Foundation (how it is implemented technologically)
2. Purpose (what the end-user/holder is intended to use it for)
3. Source of Value (where economic value of the token comes from)
4. Lifetime Quantity (how many units of the token will be created during its lifetime)
5. Minting Mechanism (how the token is issued and who has control)
6. Utility (how the token is used on a platform or within an application; more than one use is possible)



Token Foundation	Purpose	Source of Value	Lifetime Quantity	Minting Mechanism	Utility (can be multiple)
DLT Native Token <ul style="list-style-type: none"> ▪ Embedded as part of consensus, or ▪ The only native unit of accounting 	Cryptocurrency Application Economy Investment	Asset-backed Network Value Virtual Collectible	Unlimited Deflationary Unique	Protocol <ul style="list-style-type: none"> ▪ Created as part of consensus, or ▪ Generated by a «smart contract» programmatically Entity <ul style="list-style-type: none"> ▪ Group of people, or company 	Value Exchange Staking Access/Usage Incentive Governance Ownership
DLT Based Token <ul style="list-style-type: none"> ▪ Can be added by the DLT users via «contracts» or APIs 		Participation (Share like)	Fixed		
DLT Linked Token <ul style="list-style-type: none"> ▪ Depends on the DLT, but can't be directly used there (sidechain) 					

Figure 2: Illustration of the categories and a proposed classification

For example: Ether (Ethereum Blockchain, Both - Ethereum and Ethereum Classic)

- *Foundation:* DLT Native
- *Purpose:* Cryptocurrency
- *Source of Value:* Network Value
- *Quantity:* Unlimited
- *Minting Mechanism:* Protocol
- *Utility:* Value Exchange, Staking (for PoS), Access/Usage (gas for transactions and “smart contracts” execution), Incentive (for miners)

It is clear that, as stated previously, new “crypto economic” ideas and technological innovation will expand classification within each of the proposed categories. This map, therefore, has to be maintained and updated on a regular basis.

Token Regulation Map

This map is primarily intended to clearly capture how regulators will treat a particular token, given the existing set of laws. In Switzerland, FINMA will base their evaluation on the original intent of the token and not on how the token is called or might be used by third parties (e.g. a utility token speculated on by third parties will not be automatically treated as a financial security). We believe that the classification released by FINMA provides a solid and positive basis for issuing tokens in Switzerland. However, certain definitions could be further clarified, in order to avoid excessive processing requirements and overheads for the startups and enterprises issuing their tokens as well as for FINMA processing ruling requests. Note that this categorization is primarily for illustration purposes. It does not anticipate any legal or regulatory qualification. Any token always needs to be assessed and will be regulated as to its substance irrespective of its form or label (substance over form).

The following is the Token Regulation Map, based on the FINMA proposal with suggested enhancements, based on definitions proposed by Blockchain Bundesverband:



	Payment Token	Utility Token	Asset Token
FINMA	Tokens are intended to function as a means of payment. Payment tokens are digital units of value. They do not confer any particular right on the holder.	Tokens confer digital access rights to an application or service. Utility tokens have no function as an investment in economic terms.	Tokens represent assets (e.g. claims to dividends, interest payments or shares in a company, income, etc.) or may also include membership rights. Asset tokens are similar to equities, bonds or other derivative financial instruments.
bundesblock.de	Tokens are intended to function as a means of payment <i>external to the platform or not only exclusively between the platform and its users but also between users.</i>	Tokens are supposed to convey some functional utility to token holders other than <i>in addition to payment for goods or services</i> , in the form of access to a product or service. <i>They can also include:</i> <i>(i) right of access to a (future) service (once developed)</i> <i>(ii) right to redeem the token for another token or service</i> <i>(iii) voting rights which are often designed to shape the functionality of the product.</i>	Tokens are comparable to conventional financial instruments, especially to conventional debt and equity instruments.

Note that a token that satisfies multiple categories will be treated as a “hybrid” token and, therefore, laws for all categories will apply.

We strongly believe that payment and utility token categories will benefit from the definitions proposed by the *Blockchain Bundesverband*, as they make important distinctions (emphasized in italics) and, potentially, significantly reduce the burden of certain procedures (e.g. AML and KYC) on utility tokens, which would otherwise be classified as payment, or hybrid utility/payment tokens.

As explained previously, this Map is harmonized with the Token Design Map. Thus, “Purpose”, “Source of Value” and “Utility” dimensions of the Token Design Map will aid in mapping the token to one of the categories in the Token Regulation Map.

For Example: Ether (Ethereum Blockchain, Both - Ethereum and Ethereum Classic)

- *Purpose:* Cryptocurrency
- *Source of Value:* Network Value
- *Utility:* Value Exchange, Staking (for PoS), Access/Usage (gas for transactions and “smart contracts” execution), Incentive (for miners)

Thus, these characteristics make it a hybrid, **utility/payment** token.



Token Investor Scoring Map

This Map is intended as a due-diligence tool for investors and users of a token to understand and evaluate risks associated with holding a token. To make the process of evaluation easier, two scoring mechanisms were developed: one for Tokens that are still under development (anything from a white-paper to a functional prototype) and another for “ready-to-use” tokens (those that can be fully used on a functioning platform).

The following is the proposed scoring Map for non-operational tokens:

Scoring System for Non-Operational Tokens Score factors (1-10)	Weight
1. Existence of at least one open-source Github or Bitbucket repository with code in it <ul style="list-style-type: none">▪ Quantity of code (number of commits and recent activity)▪ Quality of code▪ Is it open-source code?▪ If it is not open-source, are there plans for the code to become open-source?	0.10
2. Team <ul style="list-style-type: none">▪ How committed are the team members? Are they full time? If so, since when? Are they actually on the project? Check LinkedIn profiles and verify with individuals directly if possible, especially if they are higher-profile figures.▪ Is there a diverse skillset? Developers are important but professional business and communications skills are equally important for a well-rounded team.▪ What is the likelihood that this team can deliver the project at hand? (i.e. Do they have the skillset, drive, hunger and experience?)	0.13
3. Existence of comprehensive detailed whitepaper <ul style="list-style-type: none">▪ Does the idea make sense? What is the purpose of the token?▪ How technically detailed is the whitepaper in specifying how they will achieve goals?▪ Is there a roadmap with a sensible timeline and realistic milestones▪ Is there budget transparency?	0.15
4. Amount raised and for what? <ul style="list-style-type: none">▪ What are they raising money for?▪ How much money is needed?▪ If the amount being raised is above the budgeted amount, can the amount be justified?▪ Does the budget make sense?▪ If more funds are raised than budgeted, what would happen to them?▪ If funds are not used, what happens to them?▪ If the project fails, what happens to the remaining funds?	0.1



5. Token Distribution <ul style="list-style-type: none"> ▪ What is the initial distribution? (Study who gets what and when: are the incentives aligned in order for the project to be delivered?) ▪ Lockups are good. ▪ Distributing too much to founders may give incentive to quit the project or to be too relaxed. 	0.08
6. Existence of a technical communications channel for questions where technical questions are answered in a sensible manner <ul style="list-style-type: none"> ▪ How soon do questions get answered? ▪ How does the channel respond to being challenged? ▪ Does the channel mostly focus on the technical aspect or on marketing? ▪ Risk disclosures: Do promises sound too good to be true? (e.g. “your token will increase a 100 times”) Does the language used in the channel caution potential users with regard to price and risk with words like “experimental” and “high risk”? 	0.13
7. Size of addressable market	0.12
8. Competitive landscape: <ul style="list-style-type: none"> ▪ How many competitors are there? How far along? ▪ How similar are they? Are ideas in terms of code or logo being copied? 	0.07
9. Partnership claims <ul style="list-style-type: none"> ▪ Do they have any partners? ▪ Are they legitimate claims? (easy to verify) 	0.06
10. Planned network effects and scalability <ul style="list-style-type: none"> ▪ Is the project model built in such a way that it aligns interest between “maintainers of the network” and users? ▪ Can this project scale? If not, are there plans to address this? 	0.06
Total:	1.00

The following is the proposed scoring Map for ready-to-use tokens:

Scoring system for ready-to-use tokens Score factors (1-7)	Weight
1. Activity on the open-source Github or Bitbucket repository with code in it <ul style="list-style-type: none"> ▪ Frequency and number of commits/community engagement ▪ If it is not open-source code, who is managing it? 	0.15



2. Use and users of the token (or network) <ul style="list-style-type: none">▪ How many users of the token/network are there?▪ What is the growth of users and velocity of transactions?▪ Activity and existence of blockchain explorers helpful	0.18
3. Funds being raised and for what? <ul style="list-style-type: none">▪ If they are raising an ICO and already have a “ready-to-use token”, what are the funds to be used for?▪ How are the funds governed to ensure that they are used for this purpose?	0.13
4. Governance mechanism & security <ul style="list-style-type: none">▪ If something goes wrong, how is it addressed?▪ Who takes the decision as to whether to implement a fix?▪ Is it dependent on a broader system of voting for the fix or independent of a broader system (eg. ethereum)	0.16
5. Presence on exchanges and genuine liquidity <ul style="list-style-type: none">▪ How many exchanges is it listed on and how much is it traded per day? (The answer should also give an idea of usability.)▪ Do the people behind the project “pay” liquidity providers to provide liquidity or is it genuine liquidity▪ What is the weighted liquidity of the token?	0.11
6. Token Distribution <ul style="list-style-type: none">▪ What is the token distribution mechanism? Is the number of tokens in circulation fixed or varied?▪ Is the number of tokens hard coded in? If not, how does it change?	0.1
7. Classification and purpose of token <ul style="list-style-type: none">▪ Is it clear what the use of the token is for?▪ Does the token serve a purpose that justifies its being on the blockchain?▪ Does having the token (and if relevant, the necessary network) on-chain solve a real-world problem?	0.17
TOTAL:	1.00

How to apply

Each of the criteria in the corresponding scoring sheet should be evaluated separately and, if the conclusion is positive, the corresponding weight should be added to the total score. If, on the other hand, the conclusion for a particular criterion is negative or partially positive then the corresponding weight should either not be added to the overall score at all or reduced.

The resulting score of 1.00 will represent the lowest amount of risk, whereas any score closer to 0.00 will represent significant risks in holding the token or committing to its usage.