Circular 2023/01

Liquidity in Markets for Security Tokens

Recommendations for exchange operators, issuers, promoters, market makers, and investors in Digital Assets in Switzerland

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1 Introduction

Switzerland has been a pioneer in the adoption of blockchain technology and has emerged as a leading hub for blockchain innovation. It's home to more than 1'000 DLT-related companies that pursue related business models. Among others, key reasons for its success have been a combination of a supportive regulatory environment, access to capital, and access to a talented workforce, as well as government support. Importantly, Switzerland was one of the first countries to foster crypto adoption. The authors of this circular are convinced that, thanks to its positioning, Switzerland is also excellently positioned for the next wave of DLT-adoption: the tokenization of assets and more specifically the adoption of security tokens.

Asset tokenization in capital markets has long been hailed as the next big thing in the financial industry. The digital representation of assets on distributed ledger technology promises efficiency gains along the entire value chain from issuance, distribution, order routing to custody & reporting. On top, tokenization is supposed to foster liquidity in so far illiquid asset classes such as collectibles or tokenized SME equity or bonds. Looking at today's market realities, based on the new Swiss DLT-act, Swiss companies may indeed tokenize various asset types, such as their equity, and place those assets on one of the new trading venues like TDX, SME-X, or SDX. However, the newly tokenized assets hardly find any liquidity in the secondary markets, in contrast to non regulated payment and utility tokens. All too often, investors remain locked in, not finding any volume or facing too large bid-ask spreads. Hence, the tokenization of assets so far fell short of expectations. As described in the *SBF Circular "Secondary Markets for Security Tokens[1]",* the single most important driver for the adoption of tokenized assets is, thus, creating sufficient liquidity in secondary markets. **Without liquidity, the long-term existence of a strong and globally competitive Digital Assets market is in danger, as without liquidity, no real markets will exist.**

The question, thus, arises, what the missing link may be and what Swiss institutions may do to create more market liquidity. Ultimately, the country or jurisdiction that will first solve the liquidity challenge in the Digital Assets market stands a good chance of winning in the DLT-space. Large new investments from blockchain companies and traditional finance players await. Moreover, missing or lack of liquidity could also damage the attractiveness of a country in the blockchain industry. As a leading blockchain hub, this is especially true for Switzerland. After publishing various articles and circulars in the past five years focusing on the regulation of DLT, the handling of security offerings, tokenization and more, the Swiss Blockchain Federation, hence, feels urged to contribute to the topic of liquidity with this circular (see also illustration below). The Swiss Blockchain Federation is convinced it is urgent for the Swiss Digital Asset Ecosystem to act now. Other jurisdictions are picking up speed and Switzerland is at threat of losing its edge.
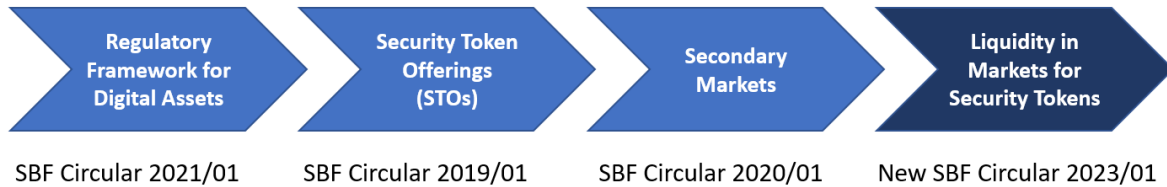
Resultantly, the main purpose of this article is to narrow down the key factors fostering the creation of liquidity in markets for security tokens and to outline ways to drive these factors. On top, the article shall support the accessibility and growth of liquidity in the Swiss digital asset market. After this brief introduction, section 2 focuses on the Swiss Blockchain Market and why Switzerland provides great potential for the industry as a whole. Section 3 gives an overview of the liquidity venues that exist for security tokens while also outlining the requirements of a functional DLT Trading System. Finally, chapter 4 highlights recommendations for the Swiss Digital Asset Ecosystem in order to ensure permanent liquidity in the Digital Assets space for many years.

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[1] SBF-2020-01_Secondary_Markets_for_Digital_Securities.pdf (blockchainfederation.ch)

Liquidity for Security Tokens (STOs)

«Liquidity is the last but most important element of a functioning capital market»

Regulatory Framework for Digital Assets	Security Token Offerings (STOs)	Secondary Markets	Liquidity in Markets for Security Tokens
SBF Circular 2021/01	SBF Circular 2019/01	SBF Circular 2020/01	New SBF Circular 2023/01

2 Digital Asset Nation Switzerland

Three years after the publication of a first circular, the authors are convinced that Switzerland can play a key role in achieving liquidity in secondary markets for tokenized assets. Importantly, as a globally leading financial center and one of the top blockchain hubs around the world, Switzerland fulfills all structural factors necessary for a functioning capital market based on DLT-infrastructure. Among these factors are, e.g., 1) DLT-friendly legal & tax framework, 2) strong access to capital, 3) innovation affinity and 4) sound public affairs. All four combined should provide enough guidance and attractiveness for exchange operators, issuers, promoters, market makers, and investors.

1. **DLT-Friendly Legal and Tax Framework:** Switzerland has a well-established legal and regulatory framework that provides clarity and certainty for all DLT-based services & market infrastructure along the capital markets value. Most importantly, the Swiss government has been proactive in creating a supportive environment for blockchain innovation, with laws and regulations that facilitate the growth of the industry. Interestingly enough, Swiss regulators chose to listen to the newly emerging industry's needs for more guidance and clarity very early on. Then, in January and August 2021 Switzerland introduced the DLT-act[2] with changes to various underlying legislations. Therein, among others, Switzerland regulated the notion of ledger-based securities and introduced the possibility for DLT-based market infrastructure.

    Moreover, Switzerland has a favorable tax regime for blockchain businesses. The country has a competitive tax rate, and the tax authorities have provided clear guidelines on how cryptocurrencies and Digital Assets are treated for tax purposes. This clarity and certainty in the legal and tax framework have made Switzerland an attractive location for blockchain companies and investors. From a regulatory basis, the prerequisites for liquidity in markets are thus fulfilled. So what are potential other factors, which need to be considered?

2. **Strong Access to Capital:** Switzerland has a well-developed financial industry with access to a broad range of capital sources, including venture capital, private equity, and institutional investors. The country's financial industry is renowned for its stability, security, and discretion, making it a preferred destination for high-net-worth individuals and institutional investors. Moreover, the Swiss government has been proactive in promoting blockchain innovation by creating various funding initiatives, such as the Crypto Valley Venture Capital Fund, which provides early-stage funding for blockchain start-ups. These initiatives have helped to attract investors and entrepreneurs to Switzerland's blockchain ecosystem, providing a strong foundation for liquidity provision for Digital Assets.

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[2] Der Bundesrat setzt DLT-Gesetz vollständig in Kraft und erlässt Verordnung (admin.ch)

3. **Innovation Affinity & Blockchain Hub:** Switzerland has a strong culture of innovation and entrepreneurship, with a highly educated workforce and a collaborative approach to problem-solving. The country has a long history of innovation in various sectors, including finance, technology, and healthcare. As per ranking by the World Economic Forum, Switzerland has even been ranked as number 1 country in terms of innovation for the past 13 years[3].

   Not surprisingly, Switzerland has also been leading in terms of blockchain research and adoption and has created various initiatives to promote collaboration between academia, industry, and government. For example, the Crypto Valley Association is a globally leading global blockchain ecosystem that brings together start-ups, investors, and regulators to promote innovation and collaboration in the industry. On top, also two of the country's universities are global leaders when it comes to blockchain academia. The UZH Blockchain Center is ranked number 3 in the world, while the ETH Zurich's center is ranked number 27 globally[4].

4. **Decentralized Public Affairs in Switzerland:** Switzerland has a stable and predictable political environment that is conducive to business. Much like in a decentralized blockchain ecosystem, the country has a decentralized, federal political system, with a strong tradition of direct democracy, which ensures that decisions are made with broad public support. Switzerland has a reputation for political neutrality, which has helped to build trust among investors and businesses. The Swiss government has also been proactive in engaging with blockchain businesses and creating a supportive environment for the industry. On top, Switzerland has created various public and private initiatives to promote the growth of the blockchain ecosystem, including the Swiss Blockchain Federation, which aims to promote blockchain innovation and education in Switzerland. Interesting outcomes of these initiatives have for instance been, the project Helvetia by BIS, the SNB and several other players, as well as the Swiss Banking's whitepaper on a Digital Swiss Franc.

As the brief description of these four factors has shown, Switzerland seems to be perfectly positioned to provide a functioning secondary market, in particular for security tokens (vs. payment or utility tokens).

However, despite all these optimal prerequisites, liquidity in markets for digital securities has not reached an attractive level in Switzerland so far. Thus, the risk of losing its great market attractivity to other financial or DLT-centers in the world is still existent. It is therefore crucial to understand the reasons and requirements for a sustainable and effective liquidity market for tokenized securities. The next sections of this paper will shed more light on that.

3. Liquidity Venues for Security Tokens

Secondary markets play an essential role in providing liquidity for securities. This chapter provides an overview of the liquidity venues that exist for security tokens. In particular, it looks at a new breed of marketplaces in Switzerland designed especially for DLT securities and offers a blueprint for setting up such a system. Last but not least, this chapter takes a broader view and examines further factors facilitating liquidity in DLT securities.

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[3] [What are the most innovative countries in the world? | World Economic Forum (weforum.org)](https://weforum.org)
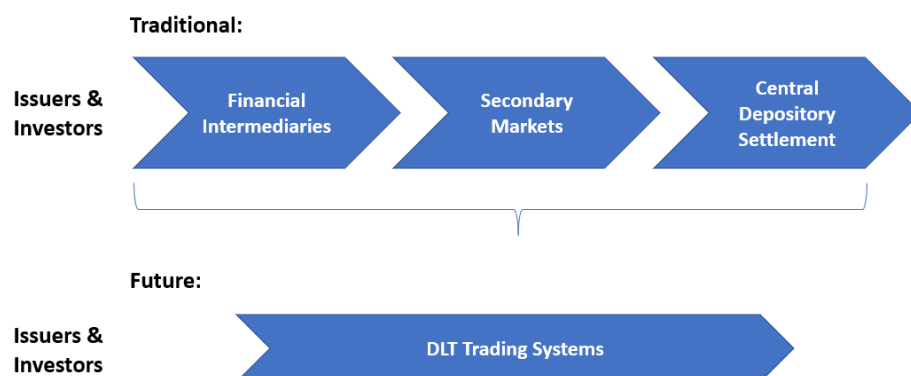[4] [University of Zurich and ETH Zurich Among World's Best Universities for Blockchain Education | Fintech Schweiz Digital Finance News – FintechNewsCH](https://fintechnewsCH)

3.1 Secondary Marketplace Taxonomy

As already described in the SBF Circular 2020/21 "Secondary Markets for Digital Assets", liquidity venues for DLT-based Securities can be clustered into the following three groups:

1. **Traditional (centralized) trading venues** such as exchanges, multilateral trading facilities (MTFs) and organized trading facilities (OTFs) - see illustration further down ("market map") for examples. These venues are governed by the rules of the Swiss Federal Act on Financial Market Infrastructure (FMIA). They have in common that issuers and investors have to access them via a financial intermediary (e.g., Bank). Furthermore, settlement requires a third, also regulated party (Central Securities Depository)[5]. This indirect and centralized structure somehow contradicts with the direct and distributed nature of blockchain technology.

2. **New (decentralized) trading venues** such as Peer-2-Peer bulletin boards, issuer operated markets for own shares and smart-contract based DLT venues. These venues offer direct[6] access for issuers and investors and are closer to the distributed nature of blockchain technology. However, in Switzerland there is no legal base for governance in place.

3. **Future "Distributed Ledger Technology Trading System (DLT Trading System)"**. It combines the best of both worlds: direct access by investors and issuers AND governance defined by Swiss law FMIA. Furthermore, it also integrates trading, clearing, settlement and potential reporting into one and only activity, bringing efficiency into the system, creating an infrastructure that is more decentralized and resilient, while dramatically simplifying and automating the financial market infrastructure ("trading on chain"). The DLT standard process within financial markets will therefore be reduced to a single transaction which includes simultaneous clearing and settlement, whereas smart contracts can generate automatic reports. At its final extent, the DLT financial market infrastructure can be composed of only one actor, the marketplace offering bid and ask offers for the trades, while clearing, settlement and reporting can be executed directly on blockchain in one step.

Value Chain in Financial Markets

In order to unlock liquidity for DLT-securities, the new DLT Trading Systems seems promising:

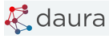[5] For initial registration of shares and for transactions between banks
[6] i.e. without intermediation by financial intermediaries

- To unlock the disruptive potential of direct access for the general public (e.g., similar to the "Tesla"-direct to consumer model)
- AND provide a regulated environment for regulated (institutional) investors

As of 2022, according to the FINMA yearly report[7], there were already 10 institutions in discussion with FINMA about obtaining a DLT-TS license.

For more details about the various trading venues, please consult the SBF circular on Secondary Markets mentioned above.

Liquidity Venues Market Map with Examples

Notes: *Typically offered by licensed banks
**can be accessed by non-financial institutions, can offer custody and trading and settlement under same license
FMIA = Financial Market Infrastructure Act
Source: Based on Circular on Secondary Markets by Swiss Blockchain Federation

3.2 Blueprint for a DLT Trading System

The creation of a DLT Trading System requires four different levels of competences, which will be described in the following:

1. **Technology:** DLT is still an early stage technology. As per today, it's not clear which blockchain will rule the financial markets. The first strategic decision concerning the creation of a DLT trading venue concerns therefore the identification of the blockchain to be used. This decision is also relevant to generate liquidity, since having different blockchain is creating a dispersion of the liquidity.

   Another topic is related to the use of public or permissioned blockchains. The legal framework is creating less regulation in case of use of public blockchains, which are decentralized and cannot be controlled. However many institutions are not kind to use public blockchain, willing and wanting to keep control over the infrastructure. This is however also reducing the liquidity of the market and size of the ecosystem, so that public blockchains should be preferred over the permissioned ones.

2. **Regulatory and Legal:** The Swiss legal framework as outlined in section 2 introduced clear conditions concerning the establishment of regulated DLT trading venues for securities.

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[7] 20230328-finma-jb22.pdf

Switzerland is one of the first countries to have legally recognized the DLT securities, that's a security issued through DLT. This means that in Switzerland it is not necessary to "tokenize" a security, but that a security can be legally issued directly on the blockchain.

The FMIA describes DLT Trading System as a commercially operated institution for multilateral trading of DLT securities whose purpose is the simultaneous exchange of bids between several participants and the conclusion of contracts based on non-discretionary rules and which meets at least one of the following criteria: i) it admits retailer as participants, ii) it holds DLT securities in central custody based on uniform rules and procedures, iii) it clears and settles transactions in DLT securities based on uniform rules and procedures.

Moreover, FinMIA introduce the concept of the small DLT Trading System, which is a trading venue with: i) annual trading volume of less than CHF 250 million; ii) custody volume of less than CHF 100 million; and iii) Annual settlement volume of less than CHF 250 million.

This rule allows DLT Trading Systems to operate on a different level of regulation.

Type of DLT Trading Facility	Requirements
- Non professional activity, - Decentralized DLT Trading System with public blockchains no offer to private participants, - Non multilateral exchange of bids between participants.	No authorization required
If the non professional thresholds are exceeded, 10 days to notify FINMA and 60 days to file the authorization request.	
Small DLT Trading System:	**Capital requirement** - If centralized: 5% equity but at least CHF 500'000 capital, - If decentralized CHF 500'000 capital. **Corporate Governance** - Majority of management fully independent from board of director - Business continuity can be delegated to another supervised entity - Regulatory and supervisory tasks can be carried out by non independent bodies **Other requirements** - Organization of trading - Pre- and post-trade transparency - Guarantee of orderly trading - Supervision of trading - Collaboration between trading supervisory bodies - Suspension of trading

If small DLT Trading System thresholds are exceeded, 10 days to notify FINMA and 90 days to file the authorization request.	
Non-small DLT Trading System	**Capital requirement** ● if centralized: 8% equity but at least CHF 5 Mio capital ● if decentralized CHF 5 Mio capital **Corporate Governance** ● Board of director fully independent from management ● Business continuity plan ● Regulatory and supervisory tasks delegated to the trading venue must be carried out by independent bodies **Other requirements** ● Organization of trading ● Pre- and post-trade transparency ● Guarantee of orderly trading ● Supervision of trading ● Collaboration between trading supervisory bodies ● Suspension of trading ● Appeal body ● Internal audit

3. **Human resources:** Running a DLT trading venue requires skills in different areas: technology (DLT systems), financial (how a market place is managed), regulatory (the rules that have to be applied), marketing (how to market the platform). However, it is important to understand that in a DLT Trading System many of the activities executing on traditional marketplaces are executed directly by the blockchain. This is creating efficiency and reducing the number of people necessary to run such platforms if compared to traditional stock exchanges. It should therefore be possible to obtain a DLT authorisation with a reduced number of employees, making a DLT Trading System economically more sustainable and creating therefore also less costs for the investors.

4. **Marketing and Market access:** Single investors are allowed to access a DLT Trading System. This is creating more competition between the single DLT trading venues. However, this is also introducing the opportunity, managing the cross border regulation, to market services abroad. In particular, by generating marketing not focused on a specific country or language, and working on the reversal solicitation rule, DLT Trading System allows investors from foreign countries to participate directly in the Swiss market place. The DLT can therefore be used as a solution for the (political) non equivalence recognition of Swiss stock exchanges.

3.3 Additional Factors Driving Liquidity

All that said, venues themselves facilitate liquidity only but do not originate or "create" the liquidity themselves. Hence, it is important to look at all the factors driving liquidity such as:

1. **Legal framework:** A clear and effective regulatory framework that protects investors and promotes market integrity can help to increase liquidity by ensuring market participants

operate in a fair and transparent manner. A strong legal framework creates investor confidence and financial market stability. Investors must believe that the market is fair, transparent, and efficient, and that their investments are protected by regulation and market infrastructure. In Switzerland, such a legal framework for DLT assets has been put in place.
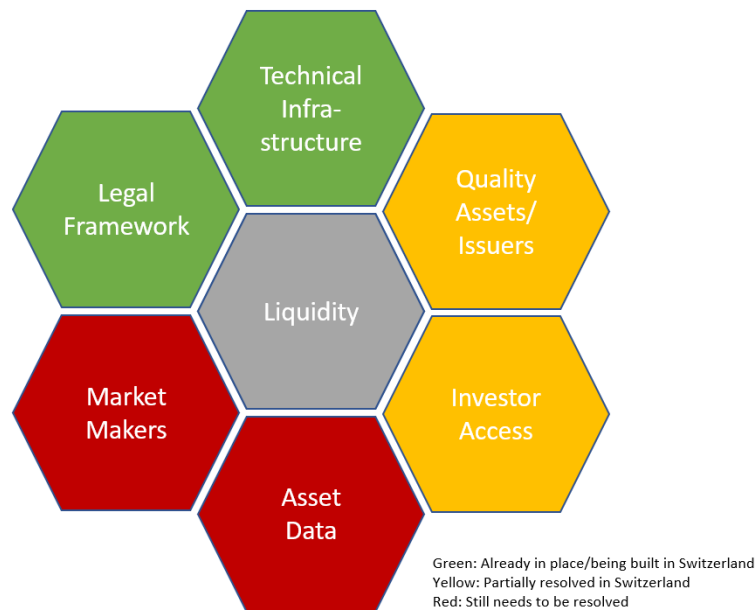
2. **Technical infrastructure**: A well-functioning market infrastructure, including trading, clearing and settlement is essential for efficient and reliable trading (in the future, these three functions will be provided in one instance).[8] As already discussed above, it is important that this infrastructure is accessible by a wide range of investors (e.g., retail and institutional), providing a broad range of buying and selling interest. It will be interesting to see who will be the first DLT Trading System in Switzerland.

3. **Quality assets/issuers**: Investor confidence in the market and the underlying assets is important for liquidity. Attractive assets will automatically attract investors[9]. For instance, according to www.tokenmarketcap.ch by Postfinance, over 70 companies have been tokenized as asset tokens, however, most of them are rather early stage companies. It will be the duty of the Swiss digital asset ecosystem (e.g., tokenization platforms, secondary markets and market makers) to define quality standards for issuers of digital securities and ensure they are adhered to.

4. **Investor access:** A diverse range of participants, including institutional investors, individual investors, and market makers, can help to increase liquidity by providing a broad range of buying and selling interest. In order to access a market in a regulated environment, investors need to go through a regulated KYC/AML onboarding process traditionally provided by financial institutions. Currently the KYC-Process in Switzerland is more formalistic in Switzerland than in Europe (e.g., many documents needed, fiat payment required). A digital identity issued by a trusted authority could simplify a direct access process and increase the number of participants.

5. **Asset data:** Transparency in the form of easily accessible, up-to-date, and reliable market data helps to increase liquidity by providing investors with the information they need to make informed trading decisions. Market makers will enter a market only if they have reliable data upon which to build an independent valuation of the assets. In a DLT world, such financial information about a company can be programmed directly into the smart contract. In order to be comparable across issuers and markets, a token standard reflecting such information is crucial. So far, this is a gap as token standards in Switzerland mostly have focused on legal aspects.

6. **Market makers**: Market makers are financial firms that facilitate trading by buying and selling securities at quoted prices. The presence of active and reliable market makers can help to increase liquidity by providing investors with a ready source of liquidity.

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[8] Additional characteristics of a liquid infrastructure: Flexibility to adapt to changing market conditions and accommodate a variety of trading strategies and instruments.
[9] And more investors will create a deeper market that can handle larger trading volumes with less price movement, thus attracting even more quality issuers & investors.

Drivers of Liquidity

Green: Already in place/being built in Switzerland
Yellow: Partially resolved in Switzerland
Red: Still needs to be resolved

In the next chapter, we are formulating recommendations for improving these important factors driving liquidity in markets for digital securities.

Note: The existence of a digital stable currency ("cash leg") which will be a further (technical) facilitator for liquidity in digital securities is not covered here as there will be a separate SBF circular on this topic.

4. Recommendations for Switzerland

Based on the above analysis of gaps in liquidity in Digital Assets, we have put together a list of recommendations for the Swiss Digital Asset Ecosystem.

The recommendations in this paper are based on observations of the successes and failures in the markets of crypto, digital asset and traditional finance, both neo and established players. Given the maturity of the market, no data driven evidence for the thesis was conducted. The conclusions are based on trying to identify drivers, levers and context of the market participants. Last but not least, these recommendations are not mutually exclusive, but rather directional for enabling a landmark success in the space of Digital Assets in Switzerland on a global scale.

4.1 Recommendations

To create traction on liquidity pools for Digital Assets, the following seven focus-levers are to be considered. It must be understood that liquidity cannot be called for, but rather needs enablement on multiple levels. One can stipulate that the recent efforts did not create the expected results due to narrow scoping and not addressing the holistic nature of the challenge. Additionally, Switzerland as an established and respected financial jurisdiction shall use the new technology for invention of new business models, rather than replacing the current infrastructure with blockchain technology.

The eight steps to heaven towards a successful liquidity provision:

1. Ensure **direct access for Retail**, Corporate and Institutional clients to secondary marketplaces. Disruptive innovation potential is the greatest in the retail category, as evidenced by the successful crypto exchanges and neo finance houses. This new business model ensures direct access for retail clients with the combination of qualified offerings on institutional level[10]. We hence await and support the set-up of DLT Trading Systems with retail access in Switzerland.

2. **Focus on STO** (Security Token Offering - vs. payment or utility tokens[11]) since the qualification for an offering is demanding for a clearly defined regulatory framework and legislation. Switzerland has a leading advantage compared to other leading jurisdictions. STO's do represent a pure claim of ownership, rather the indirect claim through utility token or sometimes payment tokens. Last but not least, there are already established category leaders in Crypto exchanges, which are very hard to challenge & Switzerland cannot offer a great jurisdictional advantage. Organizations setting-up DLT Trading Systems in Switzerland should keep this point in mind when defining their product offering. On a further thought, we suggest STOs with a differentiated/higher public purpose such as new energy/ESG could be considered for tax incentivization, in the future.

3. **Ensure completeness of Smart Contract in order to enable independent third party validation and valuation** of the security token. In other words, the smart contract design needs to ensure the content of all attributes that are relevant for price identification and discovery. We hence suggest establishing a framework for financial information in Digital Assets and a smart contract standard in Switzerland embedding this financial framework.

4. Understand that **Market Makers are a prerequisite of a successful liquidity** venue. Market Makers are sophisticated participants who maintain their own valuation model (see point 3) with a deep understanding of the market depth and interests. The biggest risk of a Market Maker is not able to balance off his commitment. In order to mitigate the risk, the market maker will state limits on size and may pool interests in specific time windows. Please note that the Market Maker lives off volumes, rather than margins. We suggest populating a list of Market Makers and discussing a roadmap of liquidity provision with them.

5. **"Good Issuers with good assets at a good price"** states the obvious. However, most of the observed offerings do unfortunately not yet represent this credo on all three dimensions. The combination of institutional offerings with retail clients will by definition ensure a standard that will satisfy the quality standards of all market participants involved. DLT Trading Systems and tokenization platforms are asked to (jointly) define quality standards for issuers and to "groom" companies into high quality assets. The latter (corporate finance advice) can also be an interesting role for financial intermediaries such as banks.

6. **Set priority on assets that are relevant for institutional and retail clients alike**. Those asset classes should attract global interest in a Swiss liquidity venue from an asset holder, as well as from a professional investors perspective, such as real estate for example. Assets that are by definition not liquid are not to be prioritized, such as early-stage private markets (typically most tokenized STOs) and lifestyle assets. Since the traditional Equity Market is very efficient, the debt market would benefit to a greater extent, particularly in the fields of Commodity Finance, Consumer Finance & Factoring. Organizations setting-up DLT Trading Systems in Switzerland should keep this point in mind when defining their product offering.

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[10] Vice versa, at the same time it is important for DLT Trading Systems to build bridges from the digital into the traditional financial world, e.g., making DLT assets bookable in the banking sector.

[11] See separate SBF Circular on STOs

7. **Simplify the access to DLT Trading Systems by integrating DID "Digital Identity" layers** to ensure compliance for all client segments in relation to product suitability and cross border limitations. The combination of exchange onboarding requirements for issuers and their assets, coupled with ensuring easy access for market participants such as investors and market makers and finally custody providers does require a top-down approach. In this context, it would also be desirable for FINMA to update the KYC-Process Circular (16-7) for less formalistic/online investor and issuer onboarding in order to create a level playing field with the EU[12]

8. Last but not least, **provision of a digital Swiss Franc** (whether issued by a private or public body) will allow for direct trade/settlement on the cash leg side and thus further support liquidity for Digital Assets

4.2 Conclusion & Next Steps

A lot of progress has been made in Switzerland to build the framework and infrastructure for Digital Assets. It is high noon now to also build the liquidity for it in order to keep our global leading role in DLT assets. Switzerland is well positioned to do so taking into consideration the competitive advantages mentioned above.

We hence now ask the Digital Asset community to kick-start projects and companies in the above mentioned development areas, in particular in setting-up DLT Trading Systems, creating a financial information framework for smart contracts, and Market Making for DLT assets.

SBF is here to help these players in navigating the DLT ecosystem in Switzerland, networking amongst relevant players and standard setting. SBF will furthermore work on marketing the digital asset ecosystem to key stakeholders in Switzerland and globally.[13]

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[12] Switzerland is the only country in the world with a "Form A/R/S/T" instead of a "tick the box" solution (with can be immutably stored on DLT chain)

[13] We suggest to partner in this respect with other Swiss institutions such as Swiss Global Enterprise (www.s-ge.com) and the State Secretariat for International Finance (www.sif.admin.ch)