

SPECIAL RISKS OF DIGITAL ASSETS

October 2019

I. Introduction

SEBA Bank AG ("**SEBA**") may provide a range of services to its clients (the "**Clients**") that relate to digital assets registered on a blockchain or another digital, distributed ledger or based on similar technology (collectively "**Digital Assets**"), including in particular trading, tokenization and custody services. ö

Issuing, trading, transacting, investing and holding positions in Digital Assets entails special risks to the Client, including technological, operational, market and systemic risks as well as legal, regulatory and tax risks that may differ from and/or apply in addition to those existing in relation to traditional assets including any traditional financial instruments or national and supranational currencies. In a worst case scenario, the realisation of such risks may result in a total loss of the Client's investment and potentially additional losses in excess of the original investment, depending on the type of Digital Asset and the specifics of the Client's investment activity and exposure.

II. Scope of this document

This document (the "**Digital Asset Risk Disclosure**") provides information on certain special risks associated with Digital Assets as may be relevant to the Client from time to time in connection with its business relationship with SEBA.

This Digital Asset Risk Disclosure does not constitute nor purport to constitute exhaustive disclosure of all relevant risks or other relevant aspects in connection with Digital Assets or transactions in such assets, and may not serve, under any circumstances, as a substitute for professional advice by competent subject matter experts. In particular, because the decentralised protocols that serve as underlying technology of Digital Assets are still at an early stage of development and might be subject to fundamental changes in the future, the risks outlined herein, as well as the likelihood of their realisation, may evolve or change over time and new risks may arise. SEBA is entitled, but not obliged, to update this Digital Asset Risk Disclosure to take into account new developments, in particular technological, legal, regulatory or market developments.

Unless otherwise explicitly noted in this Digital Asset Risk Disclosure, the risks described herein are outside the sphere of influence of SEBA. Other than in specific, individual cases, e.g. where SEBA itself acts as issuer or sponsor of a Digital Asset subject to separate documentation and risk disclosure, SEBA has no influence on the issuance or continued existence nor on the functionality, convertibility or transferability of any Digital Asset, including with respect to any underlying assets.

This Digital Asset Risk Disclosure supplements and forms part of the contractual arrangements governing the relationship between SEBA and the Client and must be read in conjunction with the general terms and conditions of SEBA (the "**GTC**"), the custody regulations of SEBA (the "**Custody Regulations**") and any other general or special terms of SEBA, as applicable. SEBA reserves the right to adjust and amend this Digital Asset Risk Disclosure at any time and to communicate such changes to the Client in accordance with the GTC.

III. Further relevant matters outside the scope of this document

This Digital Asset Risk Disclosure is separate from and in addition to the disclosure of risk factors by issuers, distributors, counterparties or other persons and financial services providers involved in the issuance, distribution, trading and other transactions relating to Digital Assets, as may in particular be contained in prospectuses, key information documents, white papers, fact sheets and other information sheets and which describe in more detail the risks associated with a particular Digital Asset or category of Digital Asset.

The Client is required to study any such additional documents, where available, prior to investing, trading or transacting in any Digital Asset and shall take into account the risk factors disclosed therein in its decision-making process, in addition to the risks described in this Digital Asset Risk Disclosure.

Furthermore, this Digital Asset Risk Disclosure does not discuss any matters of taxation or other legal matters in any jurisdiction relating to investments and transactions in Digital Assets. The Client is advised to retain appropriate counsel in respect of legal and tax matters.

IV. What are Digital Assets?

Digital Assets are an evolving, non-uniform asset class characterised by the use of distributed ledger technology ("DLT") or similar technology. More specifically, Digital Assets are dematerialised assets constituted and existing as entries on a public, permissioned or private blockchain or other digital, distributed ledger only. **The relevant distributed ledgers themselves and any data stored therein, including without limitation the Digital Assets as such or any references thereto, are, unless explicitly specified otherwise in relevant documentation, not operated nor controlled by SEBA and therefore outside of the sphere of influence of SEBA.**

In particular, Digital Assets may constitute native units of value that do not include or represent any claim against an issuer or another third party. Where such units are intended or used for payment purposes and do not qualify as nor represent securities or other financial instruments, they are sometimes referred to as payment tokens or (pure) crypto currencies ("**Crypto Currencies**").

Other types of Digital Assets may (i) constitute or represent any form of traditional, non-traditional or exotic financial instruments including shares, bonds, fund units, structured products or derivatives (sometimes referred to as asset tokens), (ii) grant a right of use to a digital service, platform or infrastructure (sometimes referred to as utility tokens, or (iii) constitute a hybrid form of any of the aforementioned types of Digital Assets, including Crypto Currencies (sometimes referred to as hybrid tokens). Depending on their specific structure and depending on the rules of various jurisdictions, Digital Assets may, irrespective of the terminology used by an issuer or other involved parties, qualify as securities (in such case sometimes referred to as security tokens) or other forms of financial instruments, with the associated legal and regulatory consequences, in particular if they are suitable for investment purposes.

While based on DLT, Digital Assets may be subject to centralisation effects, *e.g.* due to concentration of ownership of issued/pre-mined units with the issuer, another single party or a small number of related or unrelated parties, or due to concentration of network functions such as node operation or transaction validation with a single party or a small number of related or unrelated parties. This may cause Digital Assets to display characteristics of centrally issued instruments and/or may result in potentially detrimental effects for parties other than those participating in or having any effect on the concentration of ownership or network functions.

Digital Asset Glossary

<i>Technical term</i>	<i>Meaning and description</i>
Airdrop/Airgrab	A distribution of Crypto Currency or other Digital Asset units to a defined scope of digital ledger addresses, usually without any compensation or other form of remuneration due by the unit recipients, often for promotion or similar purposes.
DLT	Distributed Ledger Technology, referring to technology enabling the implementation of databases distributed on different nodes, or computer devices in a network, each of which may individually participates in the network by replicating and saving a copy of the ledger or parts of it.
Node	A computer that participates in a DLT network.
Miner/Minter	Refers to a device or person that operates the device performing an act of creating valid blocks. Some protocols require demonstrating proof of work (done by “Miners”) while other consensus mechanisms require the staking of the assets (done by “Minters”). In addition to the Miners and Minters, there are other consensus mechanisms which require different devices or persons, such as for example “Validators” in byzantine fault tolerant mechanisms.
Blockchain	A specific form of database based on DLT that employs a chain of blocks to reach consensus on the distributed ledger (DL).
Consensus	In the context of DLT consensus refers to the process (algorithm or mechanism) used to bring the distributed database to a synchronized state at a particular time or block.
Hard fork	A consensus affecting protocol change to which the participants that did not adopt the change will not be able to continue validating and verifying transactions.
Soft fork	A consensus affecting protocol change to which the participants that did not adopt the change will still be able to participate in validating and verifying transactions.
51% attack	A 51% attack is a potential attack on a blockchain network, where a single entity or organization is able to control a high percentage of the hash rate, potentially causing a network disruption. In such a scenario, the attacker would have enough mining power to intentionally exclude or modify the ordering of transactions. Such attacker could potentially also reverse transactions, putting it in a position to double-spend the same unit of a Digital Asset. A successful majority attack would further allow the attacker to prevent some or all transactions from being confirmed (transaction denial of service) or to prevent some or all other miners from mining, resulting in what is known as mining monopoly (censorship attack).
Collision attack/Birthday attack	Collision Attack on a cryptographic hash tries to find two inputs producing the same hash value, i.e. a hash collision. This type of cryptographic attack exploits the mathematics behind the birthday problem in probability theory and depends on the higher

	likelihood of collisions found between random attack attempts and a fixed degree of permutations. Such attack could be used to modify transactions.
Dusting Attack	A dusting attack refers to a malicious activity where an attacker breaks the privacy of holders of a Digital Asset by sending very small amounts of coins to their addresses. The activity performed on these addresses is tracked down by the attacker and used in an attempt to identify the person or company behind an address.

V. Risks of financial instruments embodied in or serving as underlying of Digital Assets

Where Digital Assets constitute, embody, incorporate, reference or represent securities or other forms of financial instruments, as a general matter, the risks applicable to such securities or other financial instruments apply in the same manner as for traditionally issued and traded instruments. As these risks apply generally and are not specific to Digital Assets, they are not further described herein.

The risks associated with trading in securities and other financial instruments are described and disclosed to the Client separately, in particular on the basis of the brochure of the Swiss Bankers Association regarding Special Risks in Securities Trading as well as in other documents, oral and written information provided to the Client in the course of the business relationship with SEBA.

VI. Risks specific to Digital Assets

1. Technology risks

Risks of Digital Assets stemming from or relating to the specific use of technology may include, without limitation:

- *Risk of Digital Assets existing on a distributed ledger only:* Unless explicitly specified otherwise, the distributed ledgers by which and on which Digital Assets exist are outside of the sphere of influence of SEBA. Digital Assets can be exposed to events specific to the relevant distributed ledger such as hard or soft forks in a blockchain which may *inter alia* lead to the creation of new or competing Digital Assets, adversely affect the functionality, convertibility or transferability or result in a full or partial loss of units or reduction (including reduction to zero) of value of the Client's Digital Assets.
- *Risk of irreversibility of transactions/faulty instructions:* Base layer transactions on a blockchain or other distributed ledger are irreversible and final and the history of transactions is computationally impractical to modify (*i.e.* would require more computing power than is reasonably expected to be available to any one person or group at any time). As a consequence, if the Client initiates or requests a transfer of Digital Assets using an incorrect digital ledger address, it will be impossible to identify the recipient and reverse the defective transaction. This risk also applies if the Client attempts to transfer Digital Assets to SEBA using an incorrect digital ledger address.
- *Risk of delayed execution:* The execution of transactions in Digital Assets on a blockchain or other distributed ledger is subject to verification and other processes involving multiple third party actors/nodes using evolving technology. This may result in significant waiting periods and delays

during which the Client may be precluded from disposing over the relevant Digital Assets while their value may fluctuate significantly or which may otherwise result in loss or damages.

- *Risk of security weaknesses within the underlying code or technology:* There is a risk that developers or other third parties may voluntarily or involuntarily introduce weaknesses or errors into the underlying code or technology of a Digital Asset, which may be exploited in various types of attacks. Successful attacks (or the perception of a technological weakness) might adversely affect the functionality, convertibility or transferability or result in a full or partial loss of units or reduction (including reduction to zero) of value of the Client's Digital Assets.
- *Risk of exploitable breakthroughs in the field of cryptography, e.g. development of quantum computers:* The state-of-the-art in cryptography, including digital encryption, may evolve over time. Advances in code decryption techniques and technical advances (including with regard to the computing power required to deploy such techniques) could pose risks to the security of Digital Assets and, if exploited, may lead to the theft, loss of units or reduction in value (including reduction to zero) of the Client's Digital Assets.
- *Risks inherent to consensus mechanisms and concentration risk:* DLT may be contingent on independent validators or other forms of consensus formation or validation susceptible to external attacks. Potential attacks include *e.g.* collision attacks, 51% attacks, dusting attacks and censorship attacks. If successful, such attacks may *e.g.* enable a perpetrator to take control of Digital Assets, engage in double spending of the same Digital Asset and/or otherwise abuse the identity or personal data of other users. Furthermore, any such attack may adversely affect the functionality, convertibility or transferability or result in a full or partial loss of units or reduction (including reduction to zero) of value of the Client's Digital Assets. The risk of a successful attack is elevated in Digital Assets based on DLT architecture with a high degree of concentration of unit ownership or network functions with a small number of parties.

2. Legal and regulatory risks

Risks of Digital Assets relating to the legal and regulatory environment may include, without limitation:

- *Risk of non-compliance or change of legal and regulatory framework:* The legal and regulatory framework governing Digital Assets in and outside of Switzerland is far from settled and continuously evolving. Existing laws and regulations, changes to the legal and regulatory framework and related measures by regulators or other governmental authorities may affect the compliant issuance, domestic and international tradability and transferability or convertibility of the Client's Digital Assets and may potentially result in a full or partial loss of units or reduction of value (including reduction to zero) thereof.
- *Risk of supervisory measures in one or more jurisdictions:* Digital Assets, their issuers or other involved parties, financial and other service providers may become subject to regulatory investigations, injunctions or other measures which may potentially result in a full or partial loss or reduction of value of the Client's Digital Assets, impact the ability to offer Digital Assets to the Client or otherwise affect the Client. Further, such measures may impede, restrict or prohibit the Client from holding or transacting in Digital Assets.
- *Risk of seizure of Digital Assets:* The technology underlying Digital Assets enables thorough forensic investigations that may be able to reach back and cover a period of time and number of transactions that would not be possible with similar effort in the context of traditional assets. Depending on the individual case, such forensic investigations could cover a period reaching back to the generation of

the relevant Digital Asset. As a result, the Client's Digital Assets may be subject to a risk of seizure by courts or governmental authorities where they have been previously used for or in connection with criminal activities or may otherwise be considered "tainted". Depending on the way the Client invests in or holds Digital Assets (*e.g.* in specific, segregated storage arrangements, by investing in a financial product with one or several Digital Assets as base value, or in a non-segregated account representing a contractual claim for delivery of a specific amount of a Digital Asset) and/or on the types of trades or transactions regarding Digital Assets that the Client engages in, the Client may from time to time hold be assigned, or receive in exchange, different units in the same Digital Asset, some of which may be subject to an elevated risk of seizure or may be "tainted" to differing degrees. Release of seized Digital Assets may be subject to foreign laws or regulations and the relevant procedures may result in costs, delays or other adverse effects to the Client.

- *Risk of legal ineffectiveness of tokenisation or transfer of tokenised rights:* Where Digital Assets are intended to constitute, embed or represent securities or other financial instruments, the legal effectiveness of such construct may be subject to differing rules in the potentially relevant jurisdictions, including in particular the jurisdiction of the issuer or the holder of the relevant Digital Asset. There is a risk that tokenisation of the supposedly underlying rights and obligations and/or the transfer of such rights and obligations by transfer of a Digital Asset may not be legally effective and that, consequently, the Client's Digital Assets may not include the expected rights and obligations, potentially resulting in a full or partial loss of units or reduction of value (including reduction to zero) thereof.
- *Classification risk:* SEBA may in its discretion from time to time determine for the purposes of its business relationship with the Client whether it considers a particular Digital Asset a Crypto Currency or another instrument such as a security or other financial instrument. Such classification is *inter partes* between the Client and SEBA only. SEBA cannot be held liable for any differing classification by authorities or other competent third parties in any jurisdiction at any given point in time, which may result in differing rights and obligations of the Client in respect of its Digital Assets in various jurisdictions over time. These may include legal and regulatory duties, tax obligations or other requirements, non-compliance with which may result in measures and sanctions including criminal liability, or which may otherwise affect the legal position of the Client or the value, transferability or convertibility of the relevant Digital Assets.

3. Market risks

Risks of Digital Assets relating to the relevant markets, trading platforms and systems may include, without limitation:

- *Markets in Digital Assets are evolving:* The markets in Digital Assets are evolving and may be subject to elevated volatility and limited transparency and reliability, execution delays or failures, all of which may potentially result in losses or other adverse effects for the Client.
- *Limited regulation:* Trading platforms and systems in Digital Assets and their participants may be unregulated or subject to limited regulation and may not provide for the same or similar safeguards as would apply in traditional financial markets, including with respect to market manipulation or insider trading. All of these inherent particularities may potentially result in losses or other adverse effects for the Client.
- *Delays in execution or settlement of transactions in Digital Assets:* Execution and settlement of transactions in Digital Assets may be dependent on particularities of the relevant distributed ledger or on the participation of third parties on the relevant network, in particular on the availability of miners

or other processing entities. Delays or failures to execute or settle transactions may potentially result in losses or other adverse effects for the Client.

- *Valuation risk of Crypto Currencies in particular:* Crypto Currencies are not typically linked to any national or supranational currency or to any asset or commodity traded on a regulated market and may be subject to elevated volatility. Market exchange rates of Crypto Currencies assets may change between issuance of an instruction for sale or purchase and execution.

By trading, transacting, investing and holding positions in Digital Assets, the Client acknowledges and accepts the risks described in this Digital Asset Risk Disclosure. Clients that do not understand this Digital Asset Risk Disclosure should retain competent counsel or refrain from engaging in activities involving Digital Assets.

SEBA is not responsible for any loss or damage resulting from the realisation of risks specific to Digital Assets that are outside the sphere of influence of SEBA or that cannot be attributed to any non-compliance by SEBA with its duties of care pursuant to the GTC, the Custody Regulations and any other general or special terms of SEBA, as applicable. Further, SEBA is under no obligation to inform the Client of the realisation or possibility of realisation of any of the risks described above or any other risks relating to Digital Assets.