DUKASCOIN

White Paper V. 37
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Introduction

Following its strategic decision to become a crypto friendly Swiss bank, Dukascopy Bank SA, Geneva (hereinafter referred to as the Bank) is pleased to introduce its own token called the Dukascoin. To the best of the Bank's knowledge, this is the first worldwide cryptocurrency of a strictly regulated bank. This is definitely the first cryptocurrency of a Swiss Bank. The Bank ensures the application of the highest AML, risk management and regulatory standards of the Swiss banking industry for operations on the crypto currency market. The Dukascoin opens a new class of crypto currencies issued by strictly regulated banks and will stay segregated from cryptos issued by non-regulated entities and startups.

The initial purpose of the Dukascoin introduction is to reward new users of Dukascopy Connect 911 messenger and the associated Multi-Currency Accounts (hereinafter referred to as MCA accounts) of the Bank. The Dukascoin, designed as a crypto means of payment, will be issued in limited quantity to serve as both payment and speculation. The Dukascoin is expected to gain in value due to a limited supply and to being the first crypto currency in the Swiss banking industry.

An MCA account is a new type of account offered by Dukascopy Bank SA (www.dukascopy.bank) intended to provide worldwide retail clientele with fast, cheap, secure, mobile and extremely user-friendly Swiss banking services embedded into a modern messenger. The Bank's objective is to collect millions of MCA clients who would benefit from unbeatable conditions for instant and free of charge transactions among themselves and excellent currency exchange rates, as well as other banking facilities.

The Bank's mission is to bring innovation and digital technologies into a stable and strictly regulated Swiss banking industry for the benefit of the Bank's clients from around the World. The Bank started to offer MCA accounts for its clients one year before the launch of the Dukascoin project. In the beginning, the number of new MCA accounts per day was about 10. In 5 months it had reached about 50. Ten months after the launch of MCA accounts, the Bank was opening 100 new accounts per day, currently (February, 2019) - above 500. With the help of the Dukascoin Airdrop, the Bank is planning to open from 1'000 to 10'000+ MCA accounts on a daily basis. With the trend continuing to be so dynamic, the Bank is eager to become the biggest digital bank regulated in Switzerland. The Dukascoin will be the instrument of this expansion.

Dukascopy Bank SA will provide its clients with the unique opportunity to receive for free, the first ever tokens created by a Swiss bank and to gain capital in case the price of these tokens rises.

Taking into consideration the limited emission of the Dukascoin combined with a distribution amongst a large number of MCA clients and the Bank's plan to pay a Deposit Reward for deposits allocated in Dukascoins, it is expected that the Dukascoin will have a permanently growing demand with a limited supply. Thus, the value of the Dukascoin could have a long-term sustainable rise since clients will want to consolidate Dukascoins on the secondary market in order to receive a high Deposit Reward from a Swiss bank. However, the emission of Dukascoins will be deliberately distributed in small portions throughout new MCA account holders. Strategic investors should continuously buy Dukascoins from many MCA holders in order to retain a large amount of Dukascoins.

The Dukascopy Connect 911 messenger is a modern digital tool for the Dukascoin expansion. Users of the messenger worldwide can instantly open MCA accounts right from their smartphones and become Dukascoins holders. Every private MCA account holder will be initially entitled to an equal portion of Dukascoins.

About Dukascopy Bank SA

Dukascopy Bank SA (www.dukascopy.com and www.dukascopy.bank) is a regulated Swiss bank. The Bank is under the supervision of the Swiss financial markets regulator: the FINMA (https://www.finma.ch/en/). Headquartered in Geneva, the Bank has representative offices in Hong Kong, Dubai, Kuala Lumpur, Riga and Kiev. The bank has regulated financial subsidiaries in EU and Japan.

Dukascopy was founded in 2004. Today Dukascopy Group is staffed with more than 400 highly qualified employees. Dukascopy Bank SA is known worldwide for being an innovative financial institution. Read more about the Bank in the world press: (https://www.dukascopy.com/swiss/english/about/press_release/).

The Bank is a member of the Swiss Bankers Association:

https://www.swissbanking.org/en/bankers-association/organization/members/ .

The Bank's independent auditor is KPMG Switzerland. Audited Financial Statements of Dukascopy Group are available via this link:

https://www.dukascopy.com/swiss/english/about/financial-reports/ .

The Airdrop concept

The Bank will provide its clients the unique opportunity to receive, for free, the first ever tokens created by a Swiss bank and to gain capital when the price of these tokens will rise.

The following factors will lead to an appreciation of Dukascoins:

(i)   Dukascoins will be released in limited quantity. Limited supply inevitably leads to a rise in price (provided that demand exceeds the offer).

(ii)   Holders of Dukascoins keeping their tokens at the Bank will be able to receive a Deposit Reward paid in Dukascoins from the Bank. The Deposit Reward rate will be based on the number of Dukascoins deposited with the Bank.

(iii)   The Bank will facilitate the sale and purchase of Dukascoins via its own infrastructure. For this, the Bank is developing a bulletin board and will secure the settlement of transactions between its clients as "cash against delivery".

(iv)   The Bank will endeavor to arrange that reputable crypto brokers and crypto exchanges will trade Dukascoins.

The Dukascoin is unique because it is the first token created by a regulated Swiss bank. The Airdrop project will be subject to strict regulatory control and will comply with high banking standards. Regardless of the number of crypto-currencies that other banks may create, the Dukascoin will remain the first.

Dukascoins will be offered for free to all holders of MCA accounts according to the rules described below.

The Bank distinguishes three groups of clients who will be eligible to participate in the Airdrop:

(i)   New clients who are private persons opening an MCA account;

(ii)   Existing clients who are private persons and have an MCA account;

(iii)   Existing clients who introduce new private persons opening an MCA account (further called Referrers).

Dukascoins will be released only upon the opening of a new MCA account by a private person. For each new MCA account, 20 Dukascoins will be released by the Bank and distributed as follows:

(i)   Five Dukascoins to the new MCA client;

(ii)   Five Dukascoins to the Referrer. If the MCA client has no Referrer, the Bank is considered to be the Referrer and receives 5 Dukascoins;

(iii)   Ten Dukascoins to the Bank (to cover costs related to clients onboarding, Dukascoins Deposit Reward payments, regulatory environment, IT infrastructure, marketing or any other activities).

Legal entities will be able to receive Dukascoins in the frame of the Airdrop only if they act as a Referrer. However, legal entities will be able to buy Dukascoins on the secondary market. Explicit identification of a client during the account opening process absolutely excludes that any same person will be able to get the initial portion of Dukascoins twice or more and excludes the risk of fraud on this level.

To ensure Dukascoins distribution transparency, the Bank will publicly report the number of MCA accounts and the number of released Dukascoins on a daily basis.

The Bank guarantees that the release of Dukascoins will happen as mentioned above. The compliance to this release rule will be subject to an independent audit.

For MCA clients who are private persons and who opened their account before the Airdrop of Dukascoins, the Bank will also release 20 Dukascoins per MCA account and will offer the following:

(i)   An MCA account holder who does not benefit from the MCA promotional program will receive five Dukascoins and his/her Referrer, if any, will receive five Dukascoins as well. Ten Dukascoins will be credited to the Bank. If the

MCA client has no Referrer, the Bank is considered as the Referrer and additionally receives 5 Dukascoins.

(ii)   If the Bank is not be able to transfer 5 Dukascoins eligible to an MCA account holder who cannot benefit from the MCA promotional program (MCA account closed, blocked or under the cancellation procedure) the Bank will release all 20 Dukascoins in favor of itself.

(iii)   An MCA account holder and his/her Referrer who received 5 EUR pursuant to the MCA promotional program will be offered the possibility to buy 5 Dukascoins at the price of 5 EUR during a period of 1 month starting from the date of the Airdrop. 10 Dukascoins will be credited to the Bank. If the MCA client has no Referrer, the Bank additionally receives 5 Dukascoins. All Dukascoins not purchased by MCA clients or by their Referrers pursuant to this offer will be awarded to the Bank.

The Bank has the right to limit the number of referred clients per one Referrer (10 000 per one Referrer for the initial period of Dukascoin's circulation). The breach of the limit and special conditions or referral reward will be subject to a dedicated agreement between The Bank and Referrer.

The Bank will not take any other obligations than releasing Dukascoins as per the conditions set above.

Specific limited cases

The Bank can apply the following methods to increase or decrease the number of Dukascoins in circulation:

To increase the number of Dukascoins in circulation the Bank can award users of Dukascopy Connect 911 and clients of the Bank with additionally released Dukascoins. To support liquidity of the token and to pay Coin Rewards, the Bank may occasionally release limited amounts of Dukascoins in its favour for further distribution. Such limited cases will be publicly announced on the website of the Bank and included in the common statistics of released Dukascoins. Dukascoins released in such limited cases will be credited to a custody subaccount of the Bank's client or to the external wallet of the Dukascopy Connect 911 messenger's user or to the wallet of the Bank.

To decrease the number of Dukascoins in circulation, the Bank can reclassify their own Dukascoins from released to unreleased. The consequences will be the following: cancellation of legal ownership rights of the Bank to these Dukascoins, transfer of those Dukascoins to storage as unreleased Dukascoins and the corresponding decrease of the amount of Dukascoins circulating on the secondary market. Such reclassification will be publicly announced on the website of the Bank and included in the common statistics of released Dukascoins.

The Bank may perform exceptional supplementary releases of Dukascoins to award the strategic partners of the Bank for significant contributions in the development of the Dukascoin project and extension of the scope of applications of the Dukascoin in the economy. Such exceptional releases will be publicly announced on the website of the Bank and included in the common statistics of released Dukascoins.

When the exchange rate of the Dukascoin comes close to 10 EUR per 1 coin, the Bank may implement additional methods of Dukascoins release and support. It will be announced on the Dukascoin website (www.dukascoin.com). These measures will be aimed to facilitate the usage of the Dukascoin as a means of payment.

MCA account and Dukascopy Connect 911

An MCA account is a new type of bank account offered by the Bank to all retail clients around the globe, with just a few geographical exclusions. MCA accounts promoted via the MCA promotional program include a welcoming bonus. MCA accounts are accessible both via web-site and the mobile app Dukascopy Connect 911 messenger. MCA accounts have IBAN numbers and allow access to user friendly, cheap, secure, mobile banking services including free instant payments, purchases on the Internet or in shops (contactless payments PayWave and PayPass will also be available), withdrawal of cash at ATMs via Visa and MasterCard in several currencies, investments without leverage.

The MCA accounts service integrated into the Dukascopy Connect 911 messenger is a modern mobile communication application for both financial and social activities used by people worldwide. Dukascopy Connect 911 messenger was designed to compete with well-known applications such as WhatsApp, Viber and Telegram, with the uniqueness of being fully integrated with banking services such as instant payments, currency

exchange, payment cards, bank transfers and other Banking facilities. Dukascopy Connect 911 messenger plays a key role in the 24/7 MCA account opening process.

An MCA account is a Swiss bank account designed for everybody around the globe, without minimum deposit amount requirements, closure or regular support fees and which can be opened online. Swiss banks are historically highly valued due to their stability and reliability.

Client deposits with the Bank are protected in the amount of CHF 100'000 per client. Deposit Protection is explained in details on the website (https://www.esisuisse.ch/en).

Competition landscape

Dukascopy Bank has analyzed the current situation with similar kinds of offers in the Swiss banking industry and concluded that the closest competitor is Bank CLER AG from Basel, Switzerland, which proposes a similar kind of service, including availability of retail banking, mobile banking and a referral program. Bank CLER AG pays a bonus of CHF 50 to the client for opening an account and CHF 50 to the Referrer who attracted the client to the bank. Dukascopy Bank considers this service to be a close analogue to its own offer. The Bank replaces CHF 50 with 5 Dukascoins, considering 5 Dukascoins as an adequate remuneration corresponding to the CHF 50 offered by the closest competitor.

Banks which rely on the development of their retail client base through a remuneration program are usually guided by the idea that the client's efforts in opening an account develop the bank's infrastructure and thus should be rewarded. It is assumed that the client's remuneration should adequately compensate their time spent on opening an account. The Bank agrees with this approach and has introduced an innovation compatible to it. This innovation takes the following form: instead of CHF 50 clients are rewarded with 5 Dukascoins. This theoretical proportion may be respected by The Bank for long-term stratebical development of the Dukascoin project. Explicitly, for a long-term sustainability of the MCA project, The Bank hopes that the Dukascoin exchange rate will stabilize at around 10 euro per 1 coin.

Clients' Dukascoin custody

The Bank will offer a custody service for Dukascoins.

As soon as any new client opens an MCA account with the Bank, 5 Dukascoins will be credited to their custody subaccount. A custody subaccount is a type of bank account nominated in Dukascoins associated with the MCA account of the client. The client is able to transfer Dukascoins from their custody subaccount to their external crypto wallet in blockchain at any moment.

All information provided above is also applicable to Dukascoins released in favor of a Referrer.

Clients will also be allowed to deposit Dukascoins from their external crypto wallets to their MCA accounts.

The Bank will provide online reporting, allowing clients to see how many Dukascoins they hold as well as any movements of Dukascoins to and from their custody subaccount.

Clients will be allowed to transfer Dukascoins between each other free of charge through their custody subaccounts. Holders of a custody subaccount will have to accept that Dukascoins may be credited to their custody account by third parties (e.g. another client) without prior notice.

The same custody subaccount will be used to buy/sell Dukascoins from/to other customers. The Bank will secure the settlement of such transactions.

The Dukascoin as a means of payment

There will be two types of payments using Dukascoins – Internal (between custody subaccounts) and External.

Transfers between MCA clients inside of the Bank are instant and free of charge.

Transfers between addresses in blockchain outside of the Bank will work as follows: Dukascoins withdrawn by clients to their external crypto wallets will circulate in accordance with the common blockchain technology rules independent from the Bank.

The Bank will accept Dukascoins as a means of payment from its clients to settle payments related to the use of the Bank's services. The Bank freely determines the exchange rate of Dukascoins it accepts as payment.

The Coin Reward paid for deposits in Dukascoins

The Bank may pay a Coin Deposit Reward for fixed term deposits in Dukascoins. The Coin Deposit Reward will be paid at the beginning of the deposit's term and will be blocked until the term's expiration. The Bank may manage and limit the minimum and/or maximum size, term and rate of the offered coin reward at its own discretion and at any time.

The standard Coin Deposit Reward rate for a one-year deposit is expected to be equal to 5% of the deposit amount. For the first year of the Dukascoin's lifespan, the Bank will broadcast a unique promotional Deposit Reward program. The amount of the reward rate paid by the Bank will significantly depend on the deposit size. The bigger the deposited amount, the higher the Deposit Reward rate paid out:

Minimum deposit size (Dukascoins)	Coin Deposit Reward rate paid by the Bank for a 1 year deposit
100	5%
250	10%
500	20%
750	30%
1'000	40%
2'000	50%
3'000	60%
4'000	70%
5'000	80%
7'500	90%
10'000	100%

This is an exceptional offer for deposits placed within the first year. The Bank may extend or stop its Coin Deposit Reward program at any time it may consider to be reasonable without affecting previously gathered deposits. Additional conditions will be announced at a later date. Each deposit is considered as a separate contract. Two deposit amounts can't be summed up without cancelling each other out.

If a client requests to cancel a term deposit in Dukascoins before the maturity date, the client will be charged a penalty of 5% of the deposited amount and will not be entitled to the Coin Deposit Reward on that particular deposit.

The Coin Deposit Reward will be paid out in Dukascoins. The Bank will pay the reward from the Bank's own Dukascoins, i.e. released in favor of the Bank or obtained on the secondary market.

The Fiat Reward paid for deposits in Dukascoins

The Bank may pay a Fiat Deposit Reward for fixed term deposits in Dukascoins. The Fiat Deposit Reward will be paid at the beginning of the deposit's term and will be blocked until the term's expiration. The Bank may manage and limit the maximum and minimum size, term and rate of the offered fiat reward at its own discretion and at any time.

The standard Fiat Deposit Reward rate for a one-year deposit is expected to be equal to EUR 0,5 for each Dukascoin allocated in accordance with the terms and conditions of the Fiat Reward deposit program.

The Bank may extend or stop its Fiat Deposit Reward program at any time without affecting previously allocated deposits. For the first year, the minimum amount of Dukascoins to be deposited and kept in order to participate in the Fiat Deposit Reward program is 50 000, the maximum is set to 100 000 Dukascoins.

Each deposit is considered as a separate contract. Two deposit amounts can't be summed up without cancelling each other out. To obtain the guarantee that a deposit will be accepted by the Bank, any client may declare their intention in advance, request a letter of confirmation and clarify the terms and conditions with the Bank.

If a client requests to cancel a term deposit in Dukascoins before the maturity date, the client will be charged a penalty of 5% of the allocated amount in Dukascoins and will not be entitled to the Fiat Deposit Reward for that particular deposit. Additional conditions may be announced at a later date.

The Fiat Deposit Reward payout is in EUR.

Marketplace and liquidity model

The Bank will organize and support an infrastructure for clients enabling them to make public or private offers to buy or to sell Dukascoins at their chosen price.

Private offers will be sent directly to the intended client(s) via the Dukascopy Connect 911 messenger.

For public offers, the Bank will develop a bulletin board where all offers will be published and available for acceptance. Offers can be placed and taken only by MCA account holders through the Dukascopy Connect 911 messenger.

The Bank will secure the settlement of transactions via the bulletin board. The Bank will be checking all announced transactions for exchange between fiat currencies and Dukascoins through technological means in order to avoid any fraudulent activity and to ensure the execution of the deals. Offers placed on the bulletin board will be available to be taken by any MCA account holder without further confirmation from the client who had placed the offer.

The Bank will not provide any automation for matching opposite offers, will not ensure FIFO or guarantee the execution at best price. Every MCA account holder will have full freedom to choose manually any offer on the bulletin board.

There will be two types of orders available: Fill-or-Kill and Partial Execution. Fill-Or-Kill orders are those which will be executed only if the full order amount is taken. Partial Execution allows part of the offered amount to be taken.

Clients will also be able to determine two order expiration types: Good Till Cancel (without predetermined expiration time) or Good Till Expiration (with determined expiration time).

In the future, it may be possible to express offers in different fiat currencies.

All deals made through the bulletin board will be indicated on an online chart showing historical prices. This chart will be publicly available.

Every new client receiving the initially released 5 Dukascoins on their newly opened MCA account has the right to sell them to other MCA clients. MCA account holders interested in purchasing them will have the right to make an offer to the new client. The Bank itself may also make its own offer.

On the secondary market, the Bank can buy Dukascoins only from MCA clients and Referrers.

To stimulate the liquidity at the internal marketplace, the Bank will periodically pay bonuses to the selected marketplace liquidity providers – namely Fat Catz. Conditions of that selection will be published on the Dukascoin website (www.dukascoin.com). Those conditions are subject to change and all amendments will be publicly available.

Clients selling Dukascoins will pay a commission. Initially it will be 1% of the amount sold. The commission rate is subject to change at the Bank's discretion. The information about rate and conditions of the charge will be published in advance on the Dukascoin website (www.dukascoin.com). The commission charged will be accumulated to award the Fat Catz mentioned above. The collected amount of bonuses to be distributed among selected liquidity providers will be announced on the Dukascoin website at the end of each period.

The Bank itself will not receive such bonuses to avoid conflicts of interests.

Dukascoin's Fat Catz will be a prestigious group of our crypto-community members. They will enjoy a significant additional income and other financial and non-financial benefits.

The Bank endeavors to regulate Fat Catz constitution rules with the idea of promoting those who make the most important contributions to the development of the Dukascoin marketplace.

The Bank is free to choose whether to provide or consume liquidity of Dukascoins on third party independent exchanges as well as on the internal marketplace.

Technology

The Dukascoin crypto token smart contract will be based on the Ethereum blockchain technology. If a better blockchain technology appears on the market, the Bank may adopt it as a replacement for Ethereum.

The contract specifications are the following:

(i)   Blockchain technology: Ethereum

(ii)   Standard: ERC20

(iii)   Name: Dukascoin

(the trademark DUKAS is registered in Switzerland under the №725155. Registration date: December 13, 2018)

(iv)   Symbol: DUK+

(v)   Total supply: 20'000'000'000

(vi)   Number of decimals: 4

(vii)   Smallest fraction of a Dukascoin: 0,0001.

Smart Contract Initiation

At the moment of smart contract initiation, 20 billion Dukascoin crypto tokens will be digitally created and transferred to "Cold" wallet managed via multi-signatures. Any hardware or seeds protecting private keys to addresses of "Cold" wallets will be stored in a vault of trusted third party banks which provide the necessary security. Handling of the means stored in safe boxes will be executed according to a highly secured procedure.

IMPORTANT NOTE: The Bank has no right to use any crypto tokens which were not released in accordance with the process described in the White Paper. Thus, 20 billion tokens initially issued and existing in the blockchain cannot be used by any party, including the Bank, before their release. No one entity or individual has ownership rights over them and the Bank will only be managing further release.

Risks mitigation measures

Before the launch, all smart contracts will pass an independent security audit. All tokens will be created and distributed to "Cold" wallet before the public announcement of the Airdrop in accordance with the "Smart Contract Initiation" paragraph.

The storage concept applied by the Bank implements highest security standards. The principles of storage will be the following:

(i) the hardware devices keeping private keys to addresses, which are able to manage multi-signature smart-contract wallets, PIN-codes and paper Recovery Seeds will be kept in safe boxes at reliable third party banks;

(ii) the security of the internet connection of Hot wallets is ensured by the Bank's common IT security system;

(iii) a specific distribution of access rights to private address keys through hardware devices will be created;

(iv) the segregation of Dukascoins owned by clients and by the Bank will be provided;

(v) 4 to 6 eyes principle for the creation of transactions will be applied;

(vi) one time addresses for receiving Dukascoins from clients will be created;

(vii) clients will be informed in real time about the amount of their Dukascoins in custody through online reporting.

To mitigate regulatory risks and risks related to money laundering, all clients operating with Dukascoins within the Bank will be subject to regular AML/KYC procedures of the Bank. The Bank will not accept any transfers of Dukascoins involving non-identified third parties. Any client willing to withdraw Dukascoins to an external wallet will have to confirm that they are the only ultimate beneficial owner of that wallet. The Bank continually will improve the screening of operations with Dukascoins according to the best industry practices.

The Bank will duly test third party service providers selected for cooperation in order to find and apply the highest professional standards.

Independent audit

The Bank is subject to regular external (KPMG) and internal (PKF Certifica) audits in financial, regulatory, IT, organizational and other aspects.

In addition to existing audits, the Bank will, on a regular basis, arrange audit missions to verify the accuracy of Dukascoins release. Those audits will ensure that all opened and active accounts are in compliance with regulations and in accordance with the Airdrop concept. Any specific limited cases described in the section Airdrop concept will be audited as well.

The Bank's management restrictions

To exclude conflict of interest, members of the Executive Committee of the Bank and members of their families are not allowed to own more than 50 000 Dukascoins (which is considered to be a reasonable amount for testing purposes) per person at any moment in time. Other employees of the Bank have no limitations in this regard.

Limitation of liability

The current version of the White Paper, as a mere presentation of the Dukascoin project, is not a contract and has no legal effect.

The Bank expressly rejects any claims, which would be based on this White Paper.

The Bank only accepts financial liability through written contracts signed by it or issued by it such as terms & conditions ruling a business relation with a third party.

Consequently, readers of the White Paper and holders of Dukascoins cannot raise any claims against the Bank pursuant to this White Paper.

Within the Bank's infrastructure, holding, trading, transferring and use of Dukascoins is subject to applicable General Terms & Conditions.

The holders of Dukascoins must understand and agree that Dukascoins transferred to wallets (addresses) external to the Bank are no longer subject to any contractual terms between the holder and the Bank.

Therefore, if a client transfers their Dukascoins to a third party outside the Bank's infrastructure, Dukascoins become held, transferred and used in the frame of relations to which the Bank is not a party. The holder shall solely and fully assume any and all possible responsibilities and liabilities concerning third parties.

Miscellaneous

The Bank has the right to change the current version of the White Paper with a public notice, one month in advance.

All possible applicable fees, rates and commissions will be publicly announced on the Bank's website.

Due to regulatory, cross border and other risks, the Bank may exclude certain groups of clients (for example residents or citizens of particular countries) from Dukascoins release rules. In such cases, Dukascoins will remain unreleased and no parties such as the Referrer or the Bank will receive Dukascoins. Any policy concerning this should be publicly announced by the Bank.

The Bank has the right to suspend and restart the release of Dukascoins at any moment. Already released Dukascoins will not be affected by this decision and will continue to circulate in accordance with the conditions of the White Paper.

DUKASCASH

White Paper v. 2

July 18, 2019

Public Testing Disclaimer

Till the moment when the Bank announces the contrary, the development stage of the Dukascash project is considered as public testing. For this period the minimum size per transaction is established at 1000 or more tokens. This measure is intended to exclude retail clients from the public testing stage. During public testing this document represents a conceptual project. The details of implementation may be changed. The Bank will make every effort to implement the project as close as possible to the procedure outlined below. Nevertheless, depending on the market situation and plans of the Bank itself, the document may be amended and supplemented at the discretion of the Bank. During the public testing stage this document does not create any obligation for the Bank to launch and maintain the products and/or services listed below. The public testing stage starts on the 3rd of July, 2019.

Independently on the results of public testing, possible future amendments to the White Paper and continuation or discontinuation of the project, the Bank takes an obligation to buy back all Dukascash tokens purchased by clients during the public test phase.

Glossary

The Bank	Dukascopy Bank SA
Bulletin board	A special interface in the Dukascopy Connect 911 messenger and MCA account web interface allowing clients to publish review and accept bids and offers of tokens belonging to MCA account holders.
Cashback	From time to time, the Bank may like to stimulate and support the activities crucial for business development by incentives presumably paid in Dukascoins.

Cold/warm/hot wallet	Internal concept describing the different levels of access rights to private keys from blockchain addresses where tokens are collected. Cold wallets are placed with a third-party bank and accessible by a minimum of 3 EXCO members simultaneously. Warm wallets are stored in the Bank's premises and accessible by 3 EXCO members simultaneously. Hot wallets are stored in the Bank's premises and accessible simultaneously by 3 different employees appointed to execute transactions in blockchain. Warm and hot wallets hold a limited number of tokens. The limits are determined by EXCO.
Emission of token	Set of technical activities with ERC-20 token smart-contract in the Ethereum blockchain, which creates and/or manages the specified amount of tokens.
ERC-20 token standard	Technical standard used for smart contracts on the Ethereum blockchain for implementation of tokens.
MCA	Multi-Currency Account - retail banking service offered by the Bank.
Dukascash base fiat currency	Specific fiat currency to which the Dukascash token is softly linked.
Release of tokens	Internal procedure of changing the status of tokens according to the White Paper followed by the transfer of "released" tokens from Unreleased wallets to the wallets with tokens owned by the Bank or by the clients.
Released/Unreleased tokens	Unreleased tokens belong to no one and the process of release is strictly limited by the White Paper rules and controlled by the Bank. Tokens Released to free circulation are allowed to be used for any purpose at

	the token holder's discretion.
Reserve	Dukascoins issued but not released, which are reserved to buy back Dukascash tokens from the clients.
Smart-contract	Special software (code) deployed into Ethereum blockchain processing the rules, which regulate the emission of tokens, the management of transactions, etc.
Token	Virtual instance in blockchain with strictly defined and hardcoded properties managed by smart-contract and transferable between blockchain addresses as a means of value, information, rights, etc.
White Paper	The document, which contains the general description of the project, its goals, legal and technology solutions applied, rights, limitations, the Bank's activities and obligations aiming to achieve the goals of the project.

At the moment of publication of this Dukascash White Paper, the Bank considers that the base infrastructure for Dukascoin emission, release and circulation has been generally created and tested. As it was expected, the clients welcomed the launch of the Dukascoin. They actively use the incentive programs and campaigns related to it. Thus, the main initial goal of the Bank has been achieved.

The Bank currently opens about one thousand Multi-Currency accounts per day supporting the referral program with rewards paid in Dukascoins. Considering the foregoing, the Bank is ready for the next stage of the Dukascoin project named Dukascash. The main purpose of the introduction of Dukascash is to enhance the use in the blockchain of payment tokens issued by Dukascopy Bank SA.

1. The Bank intends to issue Dukascash tokens with tickers EUR+, CHF+, USD+ and others (at a later stage) to be traded mainly at external trading venues. The denominations are based on the fiat currency, which the Dukascash tokens are planned to be tied to, using a "soft" linking mechanism, which is described below. The new Dukascash token will be traded by the Bank against the Dukascoin. The Bank intends to start Dukascash emission with EUR+, CHF+ and USD+, gradually increasing

the list of Dukascash tokens' base currencies depending upon clients' demand. For the purpose of simplicity, the EUR based Dukascash token (EUR+) is used in the description of Dukascash by default below.

2. Dukascash is based on the ERC-20 token standard, same as the Dukascoin (here-after referred to as "the Coin"). The main difference between a Dukascash smart-contract and Dukascoin smart-contract is the foreseen additional emissions of Dukascash tokens. Otherwise, the goal of the Bank is to use well developed and verified Dukascoin's infrastructure for Dukascash as much as possible.

3.1. The initial Dukascash tokens tranches of roughly CHF 10 million or equivalent in each base currency will be issued and initially kept by the Bank as "unreleased" tokens. Additional Dukascash tokens will be issued in tranches, depending upon client demand. Small portions (up to CHF 100'000) of unreleased Dukascash tokens will then be released in favour of the Bank to enable it to sell Dukascash tokens to clients.

3.2. The physical access to the devices allowing the use of smart-contracts (for issuance of new Dukascash tokens) will be arranged in a similar secured way adopted for Dukascoin's Cold wallets – keys kept in a safe deposit box at a third-party Swiss bank accessible collectively by a minimum of three Executive Committee Members.

4. The rules and the infrastructure created by the Bank for Dukascoins will be mostly used for Dukascash. Specifically, the Bank will deal in Dukascash tokens only with clients holding an MCA account and having linked a personal blockchain wallet to their MCA account. The Bank reserves the right to refuse any prospective client in accordance with its internal policies and regulations. The Bank will apply the same AML, risk management procedures, book-keeping of released and unreleased tokens, procedure of Dukascash tokens storage in "cold"-"warm"-"hot" wallets, withdrawal/deposit of Dukascash tokens to/from the blockchain, multi-signature functionality to access wallets, etc. similarly to Dukascoin.

5. The Bank commits use its best effort to continuously sell and buy Dukascash tokens in exchange for Dukascoins. However, the Bank's objective is to have Dukascash tokens traded mainly on external trading venues.

6. The issued unreleased Coins will be used to create the Reserve. **The Dukascoins accumulated in the Reserve will secure the buyback effort by the Bank of the Dukascash tokens denominated in all base currencies released in circulation.** The Bank will take the obligation to use its best effort to buy back from clients all released

Dukascash tokens in exchange for Dukascoins. The main purpose of separating the Reserve from other unreleased Coins is to ensure the transparency of the Reserve in the blockchain. The Reserve will be kept in the publicly announced blockchain wallet and thus will be segregated and visible in the blockchain for public control. The buyback of Dukascash tokens will be an additional way of releasing Dukascoins. At the same time the main way to release Coins is by rewarding new MCA clients in accordance with the initial Dukascoin White Paper.

7.1. The principle of determination of intrinsic value of a Dukascash token is based on the following rule: the number of Coins required to buy one unit of Dukascash base fiat currency should be equal to the number of Coins needed to buy one corresponding Dukascash token. The current price of the Coin will be taken from the Dukascoin's Bulletin Board, which enables clients of the Bank to execute peer-to-peer exchange of Dukascoins to euro and vice versa. Let's consider the example where the Coin rate against euro (DUK+/EUR) on the Dukascoin's Bulletin Board is 0.74/0.75 EUR for 1 Coin (best Bid = 0.74, best Ask = 0.75). The Bank will attempt to sell Dukascash tokens at the reverse rate of Dukascoin on the Bulletin Board at Ask: 1 / 0.74 = 1.3514. The Bank will attempt to buy Dukascash tokens at the reverse rate of Dukascoin on the Bulletin Board at Bid: 1 / 0.75 = 1.3333. Therefore, the attempted exchange rate EUR+/DUK+ will be as follows: 1.3333 / 1.3514 (Bid = 1.3333, Ask = 1.3514).

7.2. If a client would like to buy Dukascash against a fiat base currency (in our example EUR+ Dukascash token against EUR) they must do two subsequent transactions. The first one is to buy Dukascoin against EUR on the Dukascoin Bulletin Board. The second one is to buy EUR+ Dukascash token against Dukascoin from the Bank. In this example, the first transaction would be done at the Ask rate of 0.75 on the Dukascoin Bulletin Board and the second transaction would be done at the Ask rate from the Bank equal to 1.3514. Thus, the attempted cumulative rate for both mentioned transactions will be 0.75 * 1.3514 = 1.0136 EUR+/EUR.

7.3. If a client would like to sell Dukascash against a fiat base currency (in our example EUR+ Dukascash token against EUR), they must do two subsequent transactions. The first one is to sell EUR+ Dukascash to the Bank against Dukascoin. The second one is to sell Dukascoin against EUR on the Dukascoin Bulletin Board. In this example, the first transaction would be done at the Bid rate of 1.3333 and the second transaction would be done at the Bid rate on the Dukascoin Bulletin Board equal to 0.74. Thus, the attempted cumulative rate for both mentioned transactions will be 1.3333 * 0.74 = 0.9866 EUR+/EUR.

7.4. Above-mentioned calculations mean that the estimated rate EUR+/EUR is equal to 0.9866 / 1.0135 (Bid / Ask). In order to facilitate the exchange of EUR+ to EUR or vice versa for the client, the Bank may, without taking any obligations and at its own discretion, directly quote the EUR+/EUR exchange rate.

7.5. Above-mentioned calculations are for reference purposes only and not binding on the Bank. Clients willing to buy Dukascash tokens must apply to the Bank for a quotation. Up to a certain limit set by the Bank, it will only be possible to exchange Dukascash tokens against Dukascoins. Beyond that limit, the Bank reserves the right to quote Dukascash tokens against either Dukascoins or fiat currencies. The limit will be determined and may be changed by the Bank at its discretion.

7.6. Dukascash tokens with a base currency different from EUR will be quoted by the Bank based on the same main principle of intrinsic value applied for EUR+: the number of Coins required to buy one unit of the Dukascash base fiat currency should be equal to the number of Coins needed to buy one corresponding Dukascash token. The initial quotation for Dukascash tokens with other base currency would be based on the best bid/ask of DUK+/EUR from the Dukascoin Bulletin board and Dukascopy Bank cross rate of the corresponding fiat currency to EUR. As an example, let's consider the same case where the Coin rate against euro (DUK+/EUR) on the Dukascoin's Bulletin Board is 0.74/0.75 EUR for 1 Coin (best Bid = 0.74, best Ask = 0.75) and Dukascopy Bank EUR/USD rate is 1.1299/1.1300. In this case, the quotation of USD+ against DUK+ would be equal to 1.1799/1.1960. To calculate the quotation for another Dukascash token (CHF+) with the same quotation of DUK+/EUR, one will need to have the rate EUR/CHF. Let's assume this Dukascopy Bank EUR/CHF rate is 1.1199/1.1200. In this case the quotation of CHF+ against DUK+ will be 1.1905/1.2067.

7.7. **Because of this manner of price determination of the Dukascash tokens, there will always be a situation when the cross rate of Dukascash tokens in different base currencies is approximately equal to the cross rate of their base currencies.** For the examples considered above, it means that EUR+/USD+ exchange rate will be approximately equal to EUR/USD rate, the rate of EUR+/CHF+ will be approximately equal to the cross rate of EUR/CHF and the rate of USD+/CHF+ will be approximately equal to USD/CHF rate. This will allow exchanging Dukascash tokens with different base currencies in a way similar to fiat currency exchange, which, in turn, makes Dukascash a universal and convenient means of payment worldwide.

7.8. During the initial stage of the Dukascash tokens implementation, the Bank may offer quotations of Dukascash tokens with different base currencies against EUR.

8. The Bank considers Dukascash as further development of the Dukascoin. Dukascash is designed as a payment token (virtual currency token) softly linked to its fiat base currency indicated in the title (ticker). The "soft" linking is derived from the fact that the Dukascash token is linked to the base fiat currency indirectly through the intermediation of Dukascoin. Therefore, the Dukascash token can deviate from the base currency's value but thanks to the design, the Dukascash token in the long-term is supposed to seek parity with the base fiat currency, which is the Dukascash token's intrinsic value.

9. Dukascash is designed as a low-volatile payment token. The low volatility of the Dukascash token to the value of its base fiat currency makes it a far more practical means of payment compared to the Dukascoin. With the use of payment-oriented Dukascash, the Bank intends to expand the practical use of Dukascoins in business and in the real economy. In contrast to the Dukascoin, which is currently predominantly used within the Bank's ecosystem, Dukascash tokens are expected to circulate as a payment means outside of the Bank from the beginning. The Bank will collaborate with independent professionals of the crypto industry to organize the listing/exchange of Dukascash tokens against other cryptocurrencies and against fiat currencies on independent external trading venues.

10. Dukascash tokens linked to major fiat currencies are also expected to create a convenient environment for speculation and arbitrage operations. For example, users may exchange in the blockchain Dukascash tokens in one base currency to Dukascash tokens in another base currency. The Bank will encourage the trading of EUR+/USD+, USD+/CHF+, EUR+/CHF+ and other pairs on independent trading venues. This will be an important structural achievement stimulating the demand of Dukascoins and Dukascash. Thus, making the markets of both Dukascoin and Dukascash more efficient, liquid and stable. **The Bank will act as a market maker for Dukascash** providing the exchange of Dukascash tokens to Coins and vice versa. At the same time**, the Bank has no intention or obligation to be a market maker for Dukascoins**.

11. The Bank undertakes to use its best effort to provide customers with regular liquidity so that Dukascash tokens can be sold or bought against Dukascoins. The Bank, at its own discretion but with no obligation, can buy or sell Dukascash tokens for fiat currencies. Such exceptional operations in fiat currencies will be aimed at preventing excessive volatility of Dukascash tokens and Coins prices.

12. In principle, the Bank uses the best Bid and the best Ask determined on the Dukascoin Bulletin Board to calculate the rate of Dukascash tokens. If independent representative markets of Dukascoins will appear in the future, the Dukascash pricing model will be updated accordingly to include prices on external venues.

13. For the purpose of calculating Dukascash tokens' price, the Bank reserves the right to ignore any spontaneous arbitrage or price distortions created by micro lots as well as any other junk quotes on the Dukascoin Bulletin Board. This way, the Bank intends to prevent the manipulation and abuse in Dukascash pricing via attacks on the Dukascoin Bulletin Board.

14. In order to favor Dukascash tokens trading activity on external venues, the Bank plans to implement slightly less attractive trading conditions in comparison to conditions on external trading venues. The Bank may set the minimum/maximum size of the lot for trading with its clients to stimulate operations with Dukascash tokens on external venues.

15. The Bank undertakes a policy not to compete with external exchanges, where Dukascash tokens will be listed, thus, promoting their exchange on independent trading venues. The Bank is interested in the fast organization of Dukascash tokens exchange on such independent trading venues against fiat currencies and cryptocurrencies (Bitcoin, Ethereum and others).

16. At the initial stage, the Bank does not provide clients with the custody for Dukascash tokens. Later on, the Bank may accept and keep clients' Dukascash tokens in custody.

17. In the future when the Bank will offer the custody service for Dukascash tokens, it will accept Dukascash tokens from its clients at the exchange rate of 1:1 to the fiat base currency, as a payment for its services.

18. The Reserve will contain the number of Coins enough to buy back all the Dukascash tokens in circulation: number of Coins in reserve = (number of Dukascash tokens in circulation) x (price of 1 Dukascash token in Coins). The Bank will perform a regular revaluation of the Reserve in order to reflect changes of the price of Coins.

19. The initial size of the Reserve will be set at the level of one (1) billion Dukascoins. This will guarantee no risk of insufficiency in the Reserve at the early stage of the project.

20. For each group of Dukascash tokens (each base fiat currency) in circulation, the Bank will publish regular statistics that will include the total number of issued Dukascash

tokens, Dukascash tokens in circulation, the number of Dukascash tokens sold and bought back. In addition, the Bank will regularly report the size of the Reserve.

21. To promote the commercial use of Dukascash, the Bank may establish special incentive programs for business entities (merchants and other various internet-based projects), which use the Dukascash tokens as payment means to buy and sell goods and services. The Bank understands that stimulating the use of Dukascash as means of payment in the real economic environment will be vitally important from the very first stages of Dukascash tokens public introduction. To be eligible for cashback arrangement, the companies willing to integrate the Dukascash tokens into their business processes must sign a special type of contract with the Bank. The criteria and conditions set out in the contract will imply a selective audit by the Bank to avoid any misuse.

22. On top of the cashback arrangement, the Bank may stimulate the use of Dukascash tokens as a means of payment by offering corporate clients traditional banking services if they decide to integrate Dukascash tokens into their business processes.

23. The Bank intends to apply the same concept of AML/KYC controls for Dukascash tokens as it now does for Coins. Similarly to the Coins case, the Bank offers the operations in Dukascash tokens exclusively to its own clients. The client authorized to operate Dukascash tokens, must have an MCA account with the Bank and must have declared to the Bank their blockchain wallet (successfully passed AML control). The same as in the case for Dukascoins, the Bank is not able to control Dukascash tokens turnover in the open blockchain beyond its own infrastructure.