LESCOVEX

Trading platform for the creation
and exchange of digital assets

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1. Executive Summary

The Internet is experiencing a new technological revolution, a paradigm shift where the World Wide Web is evolving towards the World Wide Ledger. With the incorporation of distributed networks that use blockchain technology and smart contracts, a new "Internet of Value" is being created where finance flows freely. In this new universe, anyone can create digital assets that can be negotiated, distributed and exchanged as a token over different blockchains.

In the last 10 years, crypto currencies have become an innovative way of financing and investment, since they are mechanisms of storing value and means of payment at the same time. This favours growth for new business models and innovation across all industries, but specially in financial services whose most elemental activities have remained old-fashioned for decades.

A key advantage associated with blockchain is it has the potential to eliminate all intermediaries along the value chain. Intermediaries generate redundancies and inefficiencies which ultimately increase the costs of goods and services at consumer's expense.

The case of small agricultural producers of raw materials is a good example, since they are subject to the power of large corporations in the markets. The price of commodities is speculated by large investment funds and intermediation networks, maximising profits for distributors and losses for producers while negatively affecting the price and quality of such products.

Furthermore, small and medium-sized companies do not have the possibility of attracting financial resources in regulatory frameworks that only benefit few large corporations. Raising capital from the financial markets is a long and expensive process. In addition, neither transparency nor security is assured to investors, as financial services are often rigged or corrupted by regulatory entities. This harms civil society which ends up paying the financial industry's chaos. A prime example were shady financial instruments such as Collateralised Debt Obligations (CDOs), the subprime mortgages and the collusion of market participants, including lax regulatory pressure by regulators which led to the 2008 global financial meltdown. Blockchain technology and smart contracts bring transparency, reliability and verifiability to any market.

Lescovex was created with the aim of establishing a more just, free and secure financial and commodities market. It is a real-time digital assets exchange that provides a simple and effective tool for the creation of financial instruments as well as the digitalisation of commodities or any other asset. To do so, the platform seeks to offer a simple and intuitive environment that complies with current regulations in your region and makes your products available directly to the final buyer. We believe this is the best approach to encourage the price discovery of many assets which are distorted by long chains of intermediaries ■

2. Products and Services

Digital Assets Exchange

Market Microstructure: Trading system

Lescovex's trading system is envisaged as a hybrid between a dealer market and a limit order market. The former arises when buyers and sellers trade directly with **Lescovex** as the central counter-party, which in turn posts buy and sell prices while holding an inventory of relevant tokens for trading. The latter involves buyers and sellers placing limit orders into the trading system where the order matching process is autonomously run by software. Market orders (i.e. buy or sell orders at the best average market price) are included within the limit order market.

Whether a dealer market or limit order market approach is employed will depend on the liquidity attached to different crypto currencies, asset-backed tokens and digitalised securities. The bulk of the trading volume is expected to encompass highly liquid crypto currencies such as Bitcoin, Ethereum and Ripple and be operated on a limit order basis. While the ideal scenario is to maintain the entire trading activity with limit orders, a dealer market approach may be performed discretionarily by appointed dealer specialists when the liquidity of tokens deteriorates.

Lescovex's trading system adopts a continuous market approach where trades are made 24/7 without interruption. Only in certain circumstances, where operating and market anomalies compromise a secure and fair-trading activity, **Lescovex** will assess the possibility of fully stop all activity in the system.

The trading system further implements a price and time priority rule. A price priority rule means higher (lower) orders placed into the system by buyers (sellers) are prioritised for matching by the software. Similarly, the time priority rule executes orders on a first-in-first-out basis when two or more orders are placed with a same price.

Market Microstructure: Market segments

Our mission is to bring a secure and powerful trading platform for the creation and exchange of digital assets. To do so, we envision a market-place where all asset classes piece together a rich trading ecosystem built atop the blockchain.

Lescovex's market comprises the below two broad segments by asset class:

Commodities	
Agriculture	Metals
Energy	(Crypto) Currencies

Securities	
Equities	Debt
Derivatives	Funds

Commodities and securities will adopt the form of cryptographic, digital, assets conceived over different blockchains. Although the secondary market (i.e. tradable tokens already issued) can harbour digital assets created on different blockchains such as Bitcoin, Dash or NEM, the primary market for the creation and distribution of new tokens, under **Lescovex**'s token launcher tool, will only allow ERC20 smart contracts which are run on Ethereum's blockchain.

Additionally, we further classify the primary market by the type of smart contract available with the token launcher tool:

Crypto Currencies	
Payment tokens	*Utility tokens*

Asset-Backed Tokens	
Agriculture	*Metals*
Energy	*Currencies*
Securities	

Financial Smart Contracts	
Agriculture	*Metals*

Token Launcher Tool (TLT)

The token launcher tool is **Lescovex**'s web app for the creation and distribution of ERC20 smart contracts. It offers a simplified and user-friendly interface where vetted users can manage the variety of functionalities embedded in each smart contract. Examples of functionalities include, but not limited to, defining token supply and decimal units; setting identity certification signatures; token redemptions; as well as making and collecting fixed and variable payments.

TLT Smart Contracts

Smart contracts (tokens) are digital contracts built on the blockchain whose functionalities are run by programming code. All Solidity[1] contracts created by **Lescovex** are, or will be, publicly available on Github.com while being audited by high profile Ethereum experts.

The token launcher tool makes available four powerful smart contracts:

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1   Solidity is the programming language underlying Ethereum smart contracts

SC01: Crypto currency

Crypto currencies can be used as a store of value and medium of exchange as well as provide some functionalities such as access to web applications and other services. **Lescovex** contemplates crypto currencies as commodities. They are highly fungible and have no intrinsic value, so their value is driven by their utility and scarcity rather than a stream of cash flows.

Lescovex further classifies crypto currencies as either payment tokens or utility tokens. Payment tokens are those crypto currencies without any functionality apart from storing value and means of payment. Some examples are Bitcoin, Litecoin and Dash. Utility tokens in contrast possess an inherent functionality besides storing value and means of payment. Ether, NEO and Waves are examples of utility tokens (crypto currencies) because they are necessary to run smart contracts on their respective blockchains.

SC02: Asset-Backed Token (ABT)

ABTs represent digital ownership with respect to an underlying tangible, intangible or financial asset. To decide which asset class an ABT represents to we look at its underlying asset. If an ABT is "backed" by a commodity, we will consider it a commodity. Likewise, if an underlying is a security the ABT will undoubtedly be a security. **Lescovex** only considers for listing ABTs whose underlying assets are highly fungible, such as commodities and securities. In addition, ABTs are traded in the spot market and thus cannot be regarded a financial derivative unless the underlying asset is indeed a financial derivative.

ABTs' ownership is, on the other hand, easily and securely transferred via Ethereum's blockchain and legitimacy achieved with hash-based digital contracts. Hash-based digital contracts allow the content of a digital contract, which repre-

sents the asset ownership underlying any ABT, to be converted into a unique hash and registered in the blockchain. Whenever a single character manipulation from the original contract comes out it will alter the original hash and hence will reveal the contract was tampered. The digital signatures of both contracting parties are in turn embedded within the hash-based digital contract while verified by a trusted entity.

Moreover, with the aim of facilitating the trading activity for asset-backed tokens, **Lescovex** will define standardised contracts with some specifications such as contract unit; price, quantity and quality of the underlying asset; settlement method and procedures; as well as delivery period; among others. In this regard, users who want to issue and make available to the public an ABT must adhere to these contract specifications when digitalising any asset via the token launcher tool.

Two types of ABTs are considered which reflect a high fungibility of the underlying assets:

Commodities	
Agriculture	*Metals*
Energy	*(Crypto) Currencies*

Securities	
Equities	*Debt*
Derivatives	*(Crypto) Funds*

SC03: Income Smart Contract (ISC)

ISCs allow issuers the distribution of income by setting fixed or variable payments in Ether to token holders. Income distributions are automatically executed provided some predefined contract specifications are met.

Income Smart Contracts are financial assets by definition, and may be analogous to conventional equity and debt instruments. ISCs set up with variable payments at issuers discretion will be considered equity tokens, whereas those set up with one-off or fixed periodic payments will be labelled as debt tokens.

SC04: Crypto Fund

CIFs may adopt the form of closed-end or open-end of conventional investment funds and their underlying investments comprise digital assets of any kind. Smart contracts remarkably improve the efficiency of investment funds operations, including fast and auditable capital calls, distributions and token redemptions, alongside transparent Net Asset Value (NAV) calculations. Crypto investment funds fall within the securities category.

Closed-end crypto funds have a fixed token supply so they cannot be redeemed but traded in the secondary market. Tokens' price will depend on markets' demand and therefore may trade above or below the NAV attached to the underlying investments.

Open-end crypto funds have, in contrast, a variable token supply, meaning they can be issued and redeemed upon request. Tokens' value equals the NAV of the underlying investments which includes any management fee.

Listing Requirements

To qualify for the issue and listing of new contracts, users must go through a due diligence process performed by **Lescovex**. The in depth of the assessment will depend on the type of smart contract being issued and the quality of the project or entity behind, along with any statutory legal and regulatory requirements. As a rule, tokens with no intrinsic value are expected to entail significantly lower regulatory burden than digital securities.

Over-The-Counter (OTC) Market

Lescovex offers an OTC market (i.e. off-exchange) where corporations and individuals can issue and trade tailor-made digital assets on a peer-to-peer basis, with neither supervision nor price disclosure to the public by **Lescovex**. The token launcher tool effectively adopts the role of an independent law firm that generates binding smart contracts for third parties which are run and enforced on Ethereum's blockchain.

To qualify for the creation and management of smart contracts via the token launcher tool, users need to verify their identity and pass successfully an AML and KYC assessment, without prejudice to further regulatory requirements imposed by FINMA or other regulatory bodies.

3. Identity Verification

Lescovex will carry out AML and KYC assessments on all users that intend to engage in the trading platform and token launcher tool. Two alternative methods for the verification of identity of all market participants are available: Paper-based verifications and Blockchain Certification Authority.

Paper-based Verifications

This is the common approach among digital assets exchanges across the globe. Users must provide personal details and upload several related documents such as passports, id cards and proof of residence documents which include bank statements or utility bills. If personal details and submitted documents match users are verified.

Blockchain Certification Authority (BCA)

BCA is an innovative way to verify the identity of users and was created by **Lescovex**. Falsification of identities and hacking are widespread threats among digital assets exchanges. Companies which need to verify the identity of their customers spend a great deal of time and economic effort in human resources, certification processes and audits to cope with such risks. Despite companies' efforts on this issue, user-related incidences such as distrust and large waiting periods in the verification of accounts, and sometimes even millions in losses of users' funds which lead to bankruptcy, come out often.

Surprisingly, in the age of technology revolution and internet, most entities need to go through the same independent, and costly, identity verification processes when in fact there are government and other trusted entities, such as banks and insurance companies, that follow tight controls with respect

to such verification processes. Is it not a redundancy? These trusted entities could ideally become centralised certification entities for those other "non-trusted" which need to verify their user base.

Blockchain technology provides a neutral and secure framework where information can be shared and customers' privacy assured without incurring in key legal risks relating to personal data. **Lescovex** makes available this technology to any entity willing to be part of the BCA network, which has the potential to lower costs and speed up the identity verification process, along with its reliability, while increasing confidence among all stakeholders.

The BCA smart contract works with identity verification certificates of trusted entities. It generates binding digital signatures associated with these certificates which in turn are registered in a common database embedded in the contract. This way, **Lescovex** aims to change the paradigm of identity verification and its implications for Anti-Money-Laundry (AML) and Know-Your-Customer (KYC) activities.

BCA Register

BCA integrates a method to add trusted certification entities (e.g. from governments and banks), and their root certificates into a smart contract run on Ethereum's blockchain. **Lescovex** easily and securely adds these root certificates into the smart contract. Corporations and individuals then submit their identity certificates which are verified by the BCA smart contract once the root certificates and those submitted match.

Since encrypted root certificates are of public domain, it is not necessary to trust the entity responsible for managing the contract. Anyone can query vetted fingerprints by the smart contract and, thereby, confirm whether they are the same as

in the official website or database available of the certification entity which issues those certificates.

The BCA incorporates the possibility of querying any entry record through the smart contract functions as shown below:

```solidity
Solidity code:

mapping (uint256 => CA) certificateAuthority;
mapping (address => Entity) entities;
struct CA{
string issuer;
string certificate;
}
struct Entity{
string publicKey;
string signature
```

After recording the fingerprint and the public key of the certification entity, it is possible to confirm, unequivocally, that the certificates submitted by users relate to the root certificates, and thus attest whether entities have performed the pertinent controls necessary to validate the identity of any corporation or individual.

At the beginning of the creation of the smart contract, **Lescovex**'s team is responsible for adding root certificates from countries where government entities provide x509 certificates. In Spain, certificates from the FNMT (Fabrica Nacional de Moneda y Timbre), the Treasury Department and the digital DNI (Documento Nacional de Identidad) are some examples of root certificates x509 which are compatible with BCA.

Signature of Ethereum Addresses

Lescovex BCA desktop application enables users the possibility of signing and exporting any Ethereum address from their wallet or smart contract. The below illustrates the key steps on the BCA process:

1. Trusted certification entities publish their public keys and signed Ethereum addresses which serve as proof of ownership

2. Users choose the entity which needs to verify their identity and therefore will be given access for the validation of data

3. Users select the identity certificate they want to use for verification, only the public side, and encrypt its content with the public key of the entity with given access. Hence, only this entity can decrypt the certificate which in turn releases the data while protecting users' privacy.

4. **Lescovex** adds root certificates in the smart contract, so there is a central register where any trusted certification entity can join and customers give service-provider entities permission to read and verify their digital certificates

```
Solidity code:

struct Signature{
string certificate;
string signature;
}
```

Signatures linked to digital identity certificates will confirm if users are indeed who claim to be, as well as if they have correctly signed with the certificate issued by any of the trusted certification entities available. BCA, therefore, allows users the following:

1. Proof they are the actual entity or person who claim to be

2. Sign a document which is legally binding

3. Sign a smart contract which is legally binding

4. Accept terms and conditions when contracting online

5. Keep privacy while neither revealing nor sending any personal or corporate data to non-trusted entities.

Signature Verification

The application for the verification of signatures can be downloaded from the Github account of **Lescovex**: github.com/Lescovex/LCX

The below screenshot shows how to easily access the signatures and the trusted certification entities register from **Lescovex** BCA application besides the verification of signatures. Additionally, **Lescovex** provides a repository with some examples so developers can implement the application in their portals for each of the functionalities underlying BCA, as described throughout this document.

Overall, such a small change in the verification process of identities and the application of blockchain technology, alongside cryptographic technics, can drastically change the way corporations and individuals are verified worldwide.

4. Revenue Sources

Lescovex's business model is built upon six main sources of revenue:

1. **Trading fees**
2. **Token creation fees**
3. **Listing fees**
4. **Advertising fees**
5. **White label licenses**
6. **Arbitrage trading**

Trading fees

Trading fees comprise percentage fees based on EUR volume per trade in the trading platform. Our fee schedule will be transparent, with no hidden fees.

Token creation fees

Fees in relation to the creation of new tokens from the token launcher tool. Token creation fees might involve an upfront fee as well as fees based on token supply or similar variables.

Listing fees

Listing fees include due diligence activities performed by **Lescovex** for token listing requests, including token and project/company assessments

as well as regulatory and legal impact analysis of new tokens.

Advertising fees

Advertising campaigns range from banners to paid articles and other featured content in **Lescovex**'s website.

White label license

Lescovex offers a white label license for its trading platform and operational structure. Subscribers to this license will need to customise a front-end display for the platform and select which digital assets, out of those trading in **Lescovex**'s exchange, wish to make available for trading during the license period.

The license includes not only the trading platform software but also associated operational capabilities such as AML and KYC services as well as a wide variety of fiat currencies for trading.

White label licenses are a strategic approach to expand the user base and enjoy network effects from regions difficult to market by non-locals, such as Asia and the Middle-East, while earning an attractive fee with no marginal cost.

Arbitrage trading

Arbitrage consists in making an instant, and virtually risk-free, profit by simultaneously buying and selling in two different markets when the price of a same asset differs.

Lescovex is entitled to fill any limit order, either buying or selling, in the trading platform before any other market participant does so. This provides an advantage to exploit arbitrage opportunities arising from price differences between **Lescovex**'s market and any other. Arbitrage trades are made by algorithms run by software using Lescovex's API keys and others from different digital assets exchanges.