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Attorney-Client Confidential Communication

Attorney Work Product

January 5, 2018

LaborX Pty. Ltd.
7/7 Narabang Way
Belrose NSW 2085
Attention:
Via Email at

Re: Analysis of the LHT Tokens Under the Howey Test

To whom it may concern,

Based on that definition and our reading of relevant case law, as well as on our understanding of the facts and our review of the materials you provided on the structure of the Tokens, we conclude that the Tokens would not be deemed to meet the definition of security and, accordingly, that the federal securities laws do not apply to the initial distribution and subsequent trading of such Tokens in the United States.[1]

Please accept this letter as the legal opinion, further described herein, regarding the LHT ("Token") sold by LaborX Pty. Ltd. ("Client").

1.   Introduction and Scope of Advice.

1.1.   The Client is the developer of the ChronoBank Platform ("Platform"), which is designed as a digital asset management platform. Thereupon, Client has developed the LHT asset, which is designed as s simple payment system for third parties to utilize pursuant to agreement.

1.2.   The Client previously conducted a token sale for the TIME token related to the Platform, but this memorandum does not undertake analysis thereof and only analyzes the LHT token.

1.3.   This memorandum analyses the token structure as it would operate on a fully developed platform and assumes that tokens sold prior to the launch of the Platform will comply with applicable securities

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[1] Our analysis is based on our discussions with you, the materials you provided and the law as it exists as of the date hereof. We have not considered any state or non-US law analysis, including that of federal preemption related to state blue sky laws, and this outline relates solely to the definition of security under the federal securities laws. We do not express any view on any other body of law or legal construct, including without limitation the franchise laws of any state. As of this date, to our knowledge there are no court cases, no SEC rules, and only a few SEC releases that directly address the question discussed in this memorandum as to whether certain blockchain tokens should be characterized as securities for purposes of Section 2(a)(1) of the Securities Act. As such, the SEC or a court could reach an alternative conclusion different from the one provided in this memorandum.

laws.

1.4. Velton Zegelman PC has been asked to analyze as to whether the Token, with certain features described in the Token Sale Documents (as defined below), would be considered a "security" for purposes of Section 2(a)(1) of the Securities Act of 1933 ("Securities Act") and Section 3(a)(10) of the Securities Exchange Act of 1934 ("Exchange Act").

1.5. We provide our opinion based on the following: (1) ChronoBank – Revolutionary Platform for Crypto Assets Management Exhibit A; and (2) our conversations with the Client (collectively, the "Token Sale Documents").

1.6. Please note that we have neither undertaken a legal analysis of any tax implications which may arise in connection with the token sale, nor have we undertaken a legal analysis of any legal framework not mentioned herein.

2.   Background Information

2.1. The Platform

The Platform is intended to be deployed regionally and enable participants to manage digital assets in a variety of use cases. In its simplest explanation, the Platform is akin to a developer toolkit for persons and/or entities to utilize blockchain with ease as they deem fit.

For example, a participant on the Platform may wish to create, hold, and/or transfer a digital asset (e.g., digital identity, smart contract, new tokens). The Platform enables a novice user to do so without having to devote resources to back-end development.

More specifically, the Token is a digital asset created by the Client for the purpose of assisting third parties tokenize their internal payment systems. To clarify, a third party may wish to tokenize their payroll systems. In so doing, they must create a token, deal with the   token economics, and either create or piggy-back off a blockchain. The LHT takes care of all the work and will be licensed to third parties who wish to tokenize their payroll processes.

2.2. Token Use and Functionality

The Token is simply an internal settlement currency used solely for payment of labor hours (i.e., settlement for agreed upon work).

3.   Legal Analysis

The broad definition of "security" is contained in Section 2(a)(1) of the Securities Act: "any note, stock, treasury stock, security future, security-based swap, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement… ***investment contract*** … or, in general, any interest or instrument commonly known as a 'security', or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase,

any of the foregoing".[2]

The applicable Supreme Court case for determining whether an instrument meets the definition of security is SEC v. Howey, 328 U.S. 293 (1946). The Supreme Court has reaffirmed the Howey analysis ("Howey Test") as recently as 2004 in SEC v. Edwards, 540 U.S. 398 (2004). Moreover, the SEC confirmed the applicability of the Howey Test to public token sales in the Report of Investigation, dated July 25, 2017, related to DAO Tokens. Thus, the applicable standard for analysis remains the Howey Test.

Howey focuses specifically on the term "investment contract" within the definition of security, noting that it has been used to classify those instruments that are of a "more variable character" that may be considered a form of "contract, transaction, or scheme whereby an investor lays out money in a way intended to secure income or profit from its employment." Howey, 328 U.S. at 298; Golden v. Garafolo, 678 F.2d 1139, 1144 (2d. Cir. 1982) (stating "investment contract" has been used to classify instruments that do not fit other categories); *see also* Black's Law Dictionary (10th ed. 2014).

Some of the investment interests listed above are more properly characterized as traditional types of securities, so their combination with a non-security blockchain token increases the likelihood a blockchain token will be deemed a security under US laws.

The Supreme Court in Howey developed a four-part test to determine whether an agreement constitutes an investment contract and therefore a security. Pursuant thereto, a contract constitutes an investment contract, considered a security, if there is: (i) an investment of money; (ii) in a common enterprise; (iii) with an expectation of profits; (iv) solely from the efforts of others (e.g., a promoter or third party), "regardless of whether the shares in the enterprise are evidenced by formal certificates or by nominal interest in the physical assets used by the enterprise." Howey, 328 U.S. at 298-99. ***To be considered a security, all four factors must be met***. *See* Edwards, 540 U.S. at 390.

We provide our analysis of the Token below, based on each Howey factor:

3.1. **Investment of Money.**

Under Howey, and case law following it, an investment of money may include not only the provision of capital, assets, and cash, but also goods, services, or a promissory note. *See, e.g.*, Int'l Bhd. Of Teamsters v. Daniel, 439 U.S. 551, 560 n.12 (1979); Hector v. Wiens, 533 F.2d 429, 432-33 (9th Cir. 1976); Sandusky Land, Ltd. V. Uniplan Groups, Inc., 400 F. Supp. 440, 445 (N.D. Ohio 1975).

The courts and the SEC have repeatedly stated that the term "money" includes not only fiat currency but any commonly accepted indication of value. Specifically, in its Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO, No. 81207, dated July 25, 2017, the SEC reconfirmed that ETH and other cryptocurrencies are equivalent to fiat currency for the purposes of Howey test, since both represent a "contribution of value". The same principle was previously upheld by US courts in SEC v. Shavers, No. 4:13-CV-416, 2014 WL 4652121, at *1 (E.D. Tex. Sept. 18, 2014) (holding that an investment of Bitcoin, a virtual currency, meets the first prong of Howey).

There may be an investment of money in this instance. However, this case is fairly unique and a bit more difficult to pinpoint.

The LHT is not a token that is sold. Instead, third parties will contract with the Client for independent access

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to the Platform and specific use of their LHT in their region. Thus, it may be argued that the token is neither bought or sold, and it is only earned through labor or issued pursuant to a licensing agreement.

To clarify, there will only be two types of holders of LHT: (1) the third party contracting with Client to tokenize their payroll; and (2) the laborer who receives payment in LHT.

First, the third party contracting with the Client does in fact invest money in order to obtain the LHT to issue it to laborers. Thus, in this instance, this prong is satisfied.

Second, it may be argued that services may be considered as an investment of money. (see, e.g., Uniplan Groups, Inc., 400 F. Supp. at 445). However, in Uniplan, the court illustrates applicability of this argument in a hypothetical case whereby payment for services rendered is in the form of equity and/or other clearly identified securities of a third party. In this instance, payment is in the form of a currency, the Token. Moreover, "an "investment of money" means only that the investor must commit his assets to the enterprise in such a manner as to subject himself to financial loss." Wiens, 533 F.2d at 432-33 (*citing* El Khadem v. Equity Securities Corp., 494 F.2d 1224 (9th Cir. 1974), cert. denied, 419 U.S. 900, 95 S.Ct. 183, 42 L.Ed.2d 146 (1974). In this instance, there is no investment of money in a common enterprise such that would satisfy this first prong of the Howey Test.

In sum, certain cases present an investment of money and certain cases do not. For purposes of our analysis, we believe this prong is met.

3.2. **Common Enterprise**.

Different judicial circuits in the US use different tests to analyze whether a common enterprise exists. Three approaches predominate: (i) Horizontal Commonality; (ii) Narrow Vertical Commonality; and (iii) Broad Vertical Commonality. Please see below a definition of each test and its application to Tokens.

3.2.1. *Horizontal Commonality*.

Under the Horizontal approach, a common enterprise is deemed to exist where multiple investors pool funds into an investment and the profits of each investor correlate with those of the other investors. *See e.g.,* Curran v. Merrill Lynch, 622 F.2d 216 (6th Cir. 1980). In other words, there is a proportional distribution of profits according to percentage ownership of the investor pool. Whether funds are pooled appears to be the key question, and in cases where there is no sharing of profits or pooling of funds, a common enterprise may not be deemed to exist. *See, e.g.,* Hirk v. Agri-Research Council, Inc., 561 F.2d 96, 101 (finding discretionary future trading account was not investment contract because there was no pooling of funds); Wals v. Fox Hills Dev. Corp., 24 F.3d 1016 (7ᵗʰ Cir. 1994) (promoter of condominium timeshare did not pool profits and thus no common enterprise existed).

Horizontal commonality is likely not satisfied, because any funds paid to utilize the Platform and the LHT tokens are not pooled with other funds for the purpose thereof. Instead, it is more akin to purchasing a payroll software that permits use of the software (i.e., the Platform).

3.2.2. *Narrow Vertical Commonality*.

The Narrow Vertical approach looks to whether the profits of an investor are tied to a promoter. *See* SEC v. Eurobond Exchange Ltd., 13 F.3d 1334 (9th Cir. 1994) (imposition of profit limitations on investors through requiring promoter to receive excess return rate tied promoter's fortunes to investors).

Here, the third party and laborer dichotomy referenced in § 3.1 applies as well.

First, in the case of the third party obtaining LHT tokens by virtue of contracting with the Client (i.e., promoter), their profits do not correlate. This is due to the fact that any profits made by the third party is independent of the use of the tokens. In fact, utilizing the tokens, as described below, does not generate profits for the third party itself. Thus, Narrow Vertical Commonality is not satisfied in this instance.

Second, Narrow Vertical Commonality is likely not satisfied in the laborer's case, because the profits of the laborer is not tied to that of the third party. In this instance, the promoter would be considered the third party issuing the LHT in exchange for work provided. The profits of the LHT holder are independent of the profits of the third party. To clarify, the payment of LHT in return for work may apply to a number of different cases, such as janitorial services to marketing services. Any profits realized by the to-be LHT holder is not guaranteed to correlate to any suspected profits of the promoter.

It may be argued that a third party and laborer might agree to a commission-based agreement. However, this is refuted by the fact that LHT is designed to compensate based solely on time spent and no other factors. Accordingly, there is no correlation between the profits of the laborer (i.e., the person who invests the time to obtain the Token) and the promoter (i.e., the third party).

3.2.3. *Broad Vertical Commonality*.

The Broad Vertical Approach considers whether the success of the investor depends on the promoter's expertise. If there is such reliance, then a common enterprise will be deemed to exist. See e.g., SEC v. Continental Commodities Corp., 497 F.2d 516 (5th Cir. 1974) (promoter's recommendations regarding certain futures contracts demonstrated investor reliance on promoter's expertise).

Broad Vertical Commonality is likely satisfied, because the success of the Token holder largely depends on the Client's expertise to build out the blockchain, implement its business plan, and create a working Platform.

3.3. **Expectation of Profits**.

Under this third prong of the Howey Test, profit refers to the type of return or income an investor seeks on their investment (rather than the profits that the system or issuer might earn).[3] Thus, for purposes of the Token, this could refer to any type of return or income earned by holding the Tokens, which would be narrowed to the extent it is derived passively (e.g., from the efforts of others).

In summation, just because there is a return or profit, does not mean that the investment contract is a security. It is the passive nature of the return, as determined by the "efforts of others" analysis, that results in an "investment contract" and security as opposed to a simple contract instrument.

Since courts consider this factor through the lens of the "efforts of others" factor, we analyze this prong along with the fourth factor below.

3.4. **Solely from the Efforts of Others**.

In the past, courts have been flexible with the word "solely," such that, in addition to the literal meaning, it will also include significant or essential managerial or other efforts necessary to the success of the investment. *See e.g.*, SEC v. Glenn W. Turner Enters., 474 F.2d 476, 482-83 (9th Cir. 1973); SEC v. Koscot Interplanetary, Inc., 497 F.2d 473 (5th Cir. 1974) (holding that where promoters retain immediate control

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[3] More specifically, profits may include all manner of returns, such as dividends, other periodic payments or the increased value of the investment whether it is a variable or fixed return. *See e.g.*, Edwards, 540 U.S. at 390.

over the essential managerial conduct of an enterprise, rather than remote control similar to a franchise arrangement, this element is met); *but see* <u>Hirsch v. Dupont</u>, 396 F. Supp. 1214, 1218-20 (S.D.N.Y. 1975), aff'd, 553 F.2d 750 (2d Cir. 1977) (indicating that solely should have literal application). Overall, the purpose of this fourth prong of the Howey Test is to determine whether generated profits require active involvement by the investor. If the answer is yes, then this fourth prong is likely not met.

We believe that any expected profits are not so expected to be derived from the efforts of others for the following reasons.

As described above, there is a dichotomy between the third party and the laborers. This applies here as well.

First, the third party does not expect profits from the efforts of the Client, because the third party is merely purchasing a payroll software. Akin to other software, such as ADP payroll services, a licensee thereof does not expect they will make profit by virtue of having the software. Instead, the software (i.e., the Platform and Token) are tools to maximize efficiency in business dealings for the third party.

Second, it is evident that the laborer explicitly expects profit in the form of the Token. However, such profits are explicitly tied to their own efforts and expertise. Accordingly, there is no argument to make that the laborer expects a profit solely from the effort of others.

3.5. **Conclusion.**

Based on the above analysis, we believe that the Token Sale Documents describe a digital token that is not likely to be deemed a security under applicable US laws.

4. <u>Disclaimers</u>

NO GUARANTEES: CLIENT UNDERSTANDS THE RISKS INHERENT IN THE UNCERTAIN LEGAL STATUS OF THE BLOCKCHAIN AND CRYPTOCURRENCY INDUSTRY IN THE UNITED STATES. YOU UNDERSTAND THAT LEGAL ADVICE PROVIDED HEREIN DOES NOT GUARANTEE SUCCESS OR IMMUNITY FROM CIVIL AND/OR CRIMINAL PROSECUTION DUE IN PART TO THE EVOLVING NATURE OF THE BLOCKCHAIN AND CRYPTOCURRENCY INDUSTRY IN THE UNITED STATES.

CLIENT ADVISED TO CONSULT WITH ATTORNEY: WE ADVISE CLIENT TO CONSULT WITH AN ATTORNEY AS OFTEN AS PRACTICABLE, BECAUSE THE LEGAL LANDSCAP IS ALWAYS CHANGING. WE FURTHER ADVISE CLIENT TO REMAIN AWARE OF THE SHIFTING LEGAL ISSUES REGARDING THE BLOCKCHAIN INDUSTRY.

TOKEN DESIGN VS TOKEN SALE: CLIENT UNDERSTANDS THAT EVEN IF THE TOKENS, AS DESCRIBED HEREIN, MAY NOT BE CONSIDERED A SECURITY BY DESIGN, THEY MAY BE CONSIDERED A SECURITY IN THE MANNER OF HOW AND WHEN THEY WERE SOLD AND/OR HOW THEY ARE TREATED BY TOKEN PURCHASERS. WHEREAS WE UNDERTAKE ANALYSIS OF THE MARKETING OF THE TOKEN AND THE ANTICIPATED MANNAER OF SALE, WE MAKE NO REPRESENTATION OR ASSURANCE THAT THE SALE OF THE TOKEN HAS BEEN CONDUCTED IN A MANNER TO PRECLUDE IT FROM BEING CONSIDERED A SECURITY.

NO RELIANCE REGARDING OVERARCHING LEGAL COMPLIANCE: THIS

MEMORANDUM IS NOT INTENDED TO BE RELIED UPON TO ENSURE FULL LEGAL COMPLIANCE WITH ALL US SECURITIES LAWS. THIS MEMORANDUM ONLY UNDERTAKES ANALYSIS OF THE TOKEN DESIGN AT THE CLIENT'S REQUEST AND DOES NOT UNDERTAKE ANALYSIS OF THE MANNER OF SALE AND SHOULD NOT BE RELIED UPON AS ILLUSTRATING FULL LEGAL COMPLIANCE WITH US SECURITIES LAWS.

Please do not hesitate to contact us if you have any questions.

Sincerely,

By: Julian Zegelman
        Velton Zegelman PC

Exhibit A

CHRONOBANK - REVOLUTIONARY PLATFORM FOR CRYPTO ASSETS MANAGEMENT

THE CHRONOBANK TEAM
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ABSTRACT. This whitepaper abstractly describes a system designed to tokenise labour-hours using blockchain technology. ChronoBank is a proposed implementation of the described system that can be deployed in several economic localities. The proposed system leverages smart contract techniques to automate a process whereby a country-specific 'labour-hour' token may be redeemed for real labour-hours via legally binding (traditional) contracts with labour-offering companies.

ChronoBank is also the platform with the wide functionality that may become available for Time Token holders.

1. INTRODUCTION

With the advent of cryptocurrencies, relatively instant low-cost transfers of value have become a reality. Blockchain technology, which is a defining feature of most cryptocurrencies, has recently been applied to solve a great variety of problems. Currently the most widespread implementation of blockchain technology is Bitcoin [1], which is a simple asset transfer system. The asset in Bitcoin's case is a bitcoin (BTC). The value of this token has seen rapid variation since its inception in 2009, which has hindered its feasibility as a global currency.

There have been a variety of attempts to realise the advantages of blockchain technology while simultaneously mitigating issues regarding the stability of value for cryptocurrency applications. To achieve this, many attempts employ the notion of a *stable-coin*, whereby each token of value in the system has a counterpart of equal worth stored in a non-digital and tangible form in the 'real world'.

Two example implementations of the aforementioned *stable-coin* paradigm are listed below:

USDT by Tether[2]:
Each USDT token is backed by an equivalent amount of United States Dollars (USD) held in a reserve account by the private company Tether Limited.

Digix[3]:
Each token is backed by an equivalent amount of gold, which is stored in reserves by a dedicated precious metal storage custodian.

In both examples, it is always possible for a token holder to redeem that token for its counterpart, thus ensuring its fundamental 'stable' value.

Another notable example of a *stable-coin* is Bitshares [4], which attempts to decentralise the entire system through the use of digital Contract For Differences (CFD) [5] interactions. The system presented in this whitepaper does not attempt to achieve decentralisation, but instead attempts to address some of the drawbacks surrounding existing centralised *stable-coins*. These drawbacks include difficulties regarding the storage of physical or economic wealth, and the increasing likelihood of attacks, as a single entity centralises the entire wealth of the system. Typical *stable-coins* are also subject to fluctuations in the value of their underlying asset. While these fluctuations are usually very small when compared with fluctuations in traditional cryptocurrencies, they are still significant. For example, USDT is subject to the devaluation of USD due to inflation.

In this paper, we propose a stable cryptocurrency system which addresses the aforementioned drawbacks of existing stable currency solutions. Specifically, we propose a new type of token which is not backed by any existing fiat currency or physical store of wealth, but instead is backed by legally binding contractual obligations to provide real-world labour-hours. As such, the system and its controlling entity are not responsible for the centralised storage and management of wealth. Further, the value of an unskilled labour-hour in a particular geographic region naturally adjusts according to economic conditions such as inflation, thereby maintaining the long-term intrinsic value of the cryptocurrency.

This paper is organised as follows: In Section 2 we provide an overview of the system as a whole before discussing the technical details of the necessary system components and processes. Section **??** provides economic considerations in brief, regarding the real-world deployment of this system and its feasibility. Finally, Section 3 discusses future directions and applications of the system and of ChronoBank. The appendix of this document provides supporting reference of several concepts introduced throughout the paper.

2. THE CHRONOBANK SYSTEM

Similar to existing *stable-coins* (such as USDT by Tether and Digix), we propose a centralised entity that coordinates the creation, redemption, and destruction of Labour-Hour Tokens (LHT). We refer to this entity as the ChronoBank Entity (CBE). It is responsible for the acquisition and coordination of legally binding contracts for labour, in addition to the creation and dissemination of LHT. Ultimately the role of the CBE is to ensure the stability of the LHT system through careful management of the system's underlying processes. This section will provide details describing the

proposed processes, practices, and operations undertaken by the CBE and its associates.

The system as a whole is designed with the intent of a single deployment per economic region. For instance, the system could be deployed once in Australia using the value of one labour-hour in the Australian economy, measured in Australian dollars. As this document is an abstract description of the system, it does not refer to any region-specific implementation but instead refers to generalised system parameters that must be tailored for each region. With few exceptions, all processes and structures described in this document may have slight variations in implementation between regions in which ChronoBank operates.

The initial implementation of the CBE utilised the Ethereum[6] blockchain; however, future implementations may tokenise assets on alternative blockchain systems (e.g. Waves [7], Bitcoin [1]) when it is deemed appropriate.

2.1. TIME TOKENS

In order to fund the development and operation of the ChronoBank system, there was a fundraising phase known as the crowdsale. During the crowdsale, individuals could purchase TIME tokens at a fixed rate. Time Token provides the token holder admittance to the ChronoBank system operations, which means that the Holders of TIME Tokens will extend their possibilities by unlocking the unique functionality available in the system: to create new brand platforms, to create assets and crowdsale campaigns, to Buyback ERC20 tokens, to create and remove wallets, and to vote on important decisions regarding the ChronoBank system.

TIME tokens are developed utilising the Ethereum ecosystem, specifically leveraging the ERC20 token standard[8]. The ERC20 specification is extended to provide the functionality mentioned above; this is discussed further in Section 2.1.2 below.

2.1.1. CROWDSALE

During the crowdsale, TIME tokens were created as necessary and sold at the fixed price of 100 TIME tokens for 1 bitcoin (BTC). There was no limit to the number of TIME tokens generated during the crowdsale; however, no further TIME tokens were generated after this phase of the project.

All TIME tokens purchased during the crowdsale constituted 88% of the total TIME tokens generated during the initialisation of the ChronoBank system. The remaining 12% of tokens were split with 10% given to the ChronoBank.io team (for ongoing research and development) and 2% to advisors and early adopters of the system.

2.1.2. TIME TOKEN USE

ChronoBank provides extensive possibilities to its users. It allows to manage your own *Platforms* and *Assets* that are based on Ethereum ecosystem. *Platforms* act as a base for all token operations as issuing, balance storage, transfer; *Assets* define some custom internal logic to allow implementing different behavior, for example, adding a fee to token transactions.

ChronoBank system doesnt require technical knowledge or a deep dive into it to start use of the system. All the features that are based in ChronoBank can be easily applied if the user wants to. It provides the unique functionality to manage the Assets: easy Asset creation, manage the owners of the Asset, create an Asset Buyback or start a Crowdsale campaign for their Asset. Crowdsale feature has extensive possibilities to sell for ETH, ERC20 tokens, launch external services automating sailing and funds managements from other blockchains, Bitcoing for example. To use these system possibilities there is a need to have a Time Token.

Time Token will allow the users to unlock the system unique functionality by means of deposits in Time Tokens to *TimeHolder contract*. The purpose of *TimeHolder contract* is to keep track of user Time Tokens which are allocated by the user for operations within the system. In most cases Time Token is used as fuel to perform required system functionality. This means that for the use of the functionality users will be charged a fee. Charging will be taken by ChronoBack in Time Tokens that the user previously deposited to the *TimeHolder contract*. Fee value is defined by system administrators that are permitted to manage it. There are the following features that requires fees in TIME tokens during their invocation:

(1) *Create Platform* - The Platform is a central point of user assets management. It provides the possibility to easily and quickly create new Assets.
(2) *Create Assets* (with and without fee) - Assets are ERC20 tokens that are created by users. Users that created their Assets can further operate with them, for example Assets can be Crowdsaled.
(3) *Create token crowdsale* - When users want to Crowdsale their tokens they may create a Crowdsale and get funds in any token registered in the ChronoBack system.
(4) *Create token wallet* - There is a possibility to create two types of wallets: a) multi-signature wallet with given parameters and b) multi-signature wallet with 2 factor authorization
(5) *Create Buyback* - This is the instrument allowing to regulate the market value of the ERC20 tokens. One Buyback is created per one token.

From time to time, the CBE may hold polls on the Ethereum blockchain to elicit the opinion of TIME token holders. Poll results will be incorporated into decisions made by the CBE concerning the financial or technical direction and/or implementation of the CBE system. Only TIME holders are authorized to participate in a poll.

For the Voting feature there is only a need for the user to have a Time Token deposit where the voting weight is calculated according to the rule: deposit amount defines voting weight. No fee will be charged for participation in a poll.

TIME holders may deposit and withdraw their TIME tokens at any time. Withdrawing TIME tokens will influence the voting weight of active polls in which the user participates. When the user withdraws the Time token from the *TimeHolder contract* the voting weight of this user is re-calculated according to the rule.

2.2. Labour-Hour Tokens

Labour-Hour Tokens (LHT) are the fundamental unit of value within the ChronoBank system. The purpose of these tokens is to provide a non-volatile, inflationary-resistant digital store of value on various blockchains. We envisage these tokens for utilisation in future systems, such as LaborX. LHT value is non-volatile and inflationary-resistant because it is managed with *BuyBack contract* that inherits buyback process aiming to provide value stability for LHT or other ERC20 tokens.

LHT is the main means of payment for people's work in LaborX platform, as well as ETH in mainnet. LaborX will be deployed in Side Chain and it will allow to process millions of transactions, but at the same time minimal amount of gas will be spent, since the number of transactions in the main blockhcain will be minimal: for example, one per day. That leads to the mining cost minimization and allows to scale our current system.

LHT will be mined on LaborX sidechain. The validators can receive LHT for the work of their nodes. To start mining there is a need to make a deposit in Security Guarantee Fund (SGF) which main purpose is to provide a deposit reservoir as insurance to protect against defaulting behavior of the validator. Deposits can be opened in Time or any other ERC20 token. It is important to note that there is no PoW in sidechain - but there is PoS. As Deposit will play a role of a warranty to provide protection from faulty states and fraud it will be lost by unfair validator once the fraud is detected. Also the logic of smart contracts allows in case of an attack to quickly withdraw funds from the sidechain into the main blockchain, where mining is done with full security.

3. Future Work

Economic Models. Key to the success of the ChronoBank system is an informed choice of the aforementioned economic parameters. It is essential to perform further analysis so as to determine how parameter modification impacts the feasibility and sustainability of the system in a wider context. This will necessarily be performed before a real-world implementation is constructed.

LaborX. The digital asset management system described in this document is proposed as a first step towards a larger decentralised labour system. LHT as described by this paper forms the base currency for a decentralised labour exchange platform entitled LaborX. The intention of LaborX is to enable peer-to-peer exchange of labour-hours with LHT, thereby reducing the centralisation of the proposed ChronoBank system. LaborX will incorporate a rating system whereby holders of LHT can identify fair trades by examining the quality and/or specialisation of the labour provider, given their history on the platform. By enabling direct exchange of LHT with labour-hours, the system's dependency on contractual arrangements is significantly reduced. This potentially reduces the cost and increases the stability of the system as a whole.

4. Conclusion

This paper proposes a non-volatile, inflationary-resistant, digital asset management system. This innovative system is only made possible by recent advancements in blockchain and cryptographic technologies. Leveraging these technologies, this system tokenises contractual debt in a manner that can be both economically feasible and highly practical for digital platforms, such as LaborX.

References

[1] Satoshi Nakamoto. Bitcoin: A peer-to-peer electronic cash system. 2008.
[2] Tether.to. Tether: Fiat currencies on the bitcoin blockchain. 2014.
[3] Anthony C. Eufemio Kai C. Chng Shaun Djie. Digix's whitepaper: The gold standard in crypto-assets. 2016.
[4] Fabian Schuh Daniel Larimer. Bitshares 2.0: Financial smart contract platform. 2015.
[5] Investopedia. Contract for difference.
[6] Gavin Wood. Ethereum: A secure decentralised generalised transaction ledger. *Ethereum Project Yellow Paper*, 2014.
[7] Sasha Ivanov. Waves whitepaper. 2016.
[8] Ethereum Request for Comments (ERC) 20.