

# Coin Payment Processor Whitepaper

## Focus on payments

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January 2018

Last update 2018.04.04.

v1.1

### Abstract

*Focus on global payments by decentralized lightspeed network and “world’s single coin” with stable tokens model.*

The Coin Payment Processor Project aims to improve and change three very important and closely related functionalities that will significantly change the global economy and trade as we know them today. Beside the fact that all three functionalities have strong correlation and connection, if they are combined, a new dimension will be created, that will change the work of banks, card payment systems, merchants and ordinary people all around the globe.

The evolution of money is inevitable and it is only a matter of days when a decentralized universal world currency will finally come to life. We are also witnesses of the first examples of free payment without borders, which are done instantly and without a bunch of intermediaries. Also, cryptocurrencies are one step away from getting the role of real money. The Coin Payment Processor Project is therefore on its way to connect all missing links and create a new dimension of global payment.

***Coin Payment Processor Project =  
cryptocurrency as money+open international payments+decentralized universal currency  
In blockchain We trust!***

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# 1. INTRODUCTION

***Has the time come for the role of money in man's life to evolve, considering the fact that almost one fifth of the 21st century has already passed? YES, having in mind that we have greatly implemented globalization, digitization and Internet in our lives, it is time to work on the evolution of money.***

At the end of the 20th century, globalization, as the greatest phenomenon in social-economic sense, completely changed the lifestyle of people around the globe. Growth and development of free trade is continually rising for decades. Faster, better and cheaper ways of transport of goods and people, from one end of the world to the other, have created new social-economic forms. Firstly, there is a large number of multinational companies that have economic and social strength greater than many of the third world countries. And beside that, the whole world has become one "global village" with unique market.

Secondly, faster and simpler communication on distance has transferred from manual to digital system since 1980's. Writing letters, using landlines and faxes have been replaced by personal computers and smartphones. Digitization of society is actually a phenomenon that radically changes man's overall performance, both social and economic. One small, but crucial and certainly most important item in the process of digitization and globalization, is the INTERNET – the network of all networks. Like water is essential to man's survival on Earth, so will the Internet become essential to man's functions (social and economic) in the 21st century. Ask yourself, how many companies and products would cease to function and exist without the Internet!

Phenomena of globalization, digitization and Internet have killed some of the old jobs, man's habits and needs, but on the other hand, they have created some completely new and almost unimaginable jobs, habits and needs. Economically speaking, production, sale, transport, services, and especially finances have experienced a big change. But has the monetary system, and the money itself changed and to what extent?

Yes, there is a history of money change, and its recent history is briefly depicted as follows:

- 1. Bretton Woods Agreement,**
- 2. The end of gold standard,**
- 3. Plastic cards era (currently at its peak),**
- 4. Electronic money schemes (currently at its peak),**
- 5. Shadow money era (probably near a peak),**
- 6. Crypto currencies era (currently in development),**
- 7. "World's single coin"...?**

When Bitcoin and blockchain (distributed ledger) technologies were introduced, back in 2009, a new direction in development of digital economy arose. Introduction of Bitcoin by itself implied mandatory use of new technologies in our lives, Internet and P2P communication, and without them, Bitcoin would not be possible. Also Bitcoin represented, in its own words: *A purely peer-to-peer version of electronic cash that will allow online payments to be sent directly from one party to another without going through a financial institution.*

In this document I wish to present an idea that, using a step by step development, can lead to a significant money evolution and payment system on a global level. It is deeply rooted in blockchain technology and eight year old Bitcoin's experiences. On the other hand, it respectfully includes all key factors of globalization, digitization and Internet.

The idea consists of three stages where the ultimate goal is targeted from different angles and with special development stages. These are:

- 1) **First stage** – create stable tokens that represent value of world's most notable currencies in proportion 1:1.
- 2) **Second stage** – allow every user on the planet to, simply and easily, make payments, charges or money transfers, with or without intermediary (with the possibility of anonymity), with minimal fees and maximum security, via any digital channel of communication (and maybe even offline).

- 3) **Third stage** – implies the creation of a universal and global currency as a medium for a balanced development of the future global economy and trade without discrimination or protection for a specific country and currency.

## 2. HYPOTHESES AND DILEMMAS

*Is USD a stable currency? NO, neither internally, nor externally.*

USD is not a stable currency and that is confirmed on a daily basis. Internally, USD is consolidated constantly through a changeable benchmark interest rate set by the FED and it generally loses value over time due to inflation. Externally, it has a floating currency exchange rate against other international currencies. From time to time, it gives us greater than expected shocks and there is one simple reason for that – people manage USD money supply centrally and subjectively.

Is BAM a stable currency? Yes, externally it has a fixed proportion against EUR and that proportion has been unchanged for a long period. But internally, it is not stable because it applies variable basic interest rate set by the Central bank of Bosnia and Herzegovina. Also, its external stability is a derived value of EUR, that also has a floating currency exchange rate against other currencies.

***Obvious and general conclusion is that current global currencies generally have no stability neither externally, nor internally. One of the reasons for this is that people manage them centrally and subjectively, and by removing that state, there is a possibility for the increase in stability.***

### 2.1 Mr. e-MONEY

***Is Bitcoin an “electronic cash” ? NO it is not, it is an investment opportunity.***

Bitcoin wasn't invented for investors, it was invented for the utility of digital money! Ethereum wasn't invented for investors, it was invented for the utility of the decentralized application platform! This is not a rare occasion in human history, that a certain innovation is accepted in practice in a totally unexpected way, which can surprise even its developers.

Show me just one company in the world that has Bitcoin and believes that there are no risks about its value, and therefore uses it as a method of payment and settlement of liabilities. And not to mention investment funds that treat Bitcoin and Ethereum in their portfolio only as an investment asset and conduct the same actions as for the other investment assets (risk assessment, Buy and Sell decisions...). The moment one of the crypto coins becomes exclusive unit of account and method of exchange-settlement transactions, in investment funds around the world, and not have the status of investment asset, we will know for sure that a real „electronic cash“ is finally in use.

***What is imposed as a general conclusion is that current cryptocurrencies have no money role and are not generally accepted for settlement of liabilities. One of the reasons for this is that users see them as an investment opportunities that have absolutely no external stability, not even a floating exchange rate. By resolving this problem, there would be more use of cryptocurrencies as money for payment and settlement.***

### 2.2 GLOBAL PAYMENTS

***How fast and simple can you make payments to anyone in any part of the world in the 21st century? NOT so fast and easy.***

What is very likely is that you can do this in your country without any problems. But everything beyond borders of your country is still problematic for many reasons, such as: payment intermediaries, different currencies, regulations for each country, origin of money, reason for transaction, tax treatment, AML procedures... Sometimes, it is easier to travel and take the money yourself than to make transaction through an intermediary – bank.

Technologies that we have and are widely available can radically change this. The use of the Internet and blockchain technology open doors for new, better and faster services in terms of payments and settlement of money transactions.

***The obvious general conclusion is that currently the globalization phenomenon has not improved nor enhanced the system of international payments outside the borders of one country. One of the reasons for this is that too many different bureaucratic demands and intermediaries stand in the way of open international payments. By resolving this problem, there would be a simpler service for global payments and settlement of money transactions.***

### 3. „THE HOLY GRAIL OF CRYPTO“

***Is it a problem for you crypto assets, to have 20% price change in 24h?***

In this section we will deal with the name “Holy Grail of Crypto”, a name that was coined by the news portal Coindesk, and the community readily accepted. This term relates to the “Mission impossible” in the field of cryptocurrency development - creating a STABLECOIN.

The goal of reviewing the overall state of the community and brief reviewing of interesting projects in this part is not to point out disadvantages, to give my objections or to present this project as superior to the competitors. On the contrary, my goal is not to create division and hatred but integration and SYNERGY towards achieving a higher goal.

One of the main problems with Bitcoin for ordinary users is that, while the network may be a great way of sending payments, with lower transaction costs, much more expansive global reach, and a very high level of censorship resistance, Bitcoin as the currency is a very volatile means of storing value. This volatility results from its built-in quantity commitment: because the number of Bitcoins in existence stays on a programmed path, variations in the real demand to hold Bitcoin must be accommodated entirely by variations in its unit value. When demand goes up, there is no quantity increase to dampen the rise in price; and vice-versa for a fall in demand. So, the currency has an established reputation for extreme volatility and Bitcoin holders can lose their wealth and quite often the price moves up or down by as much as 10-20% in a single day.

***Can we have the full decentralization that a cryptographic payment network offers, but at the same time have a higher level of price stability, without such extreme upward and downward swings? YES, we can!***

But the stability problem is still there and we must do something better.

There are three types of stablecoins:

1. fiat-collateralized coins,
2. crypto-collateralized coins,
3. non-collateralized coins.

Also we have seen “the evolution of stablecoin in three generation” :

1. collateral backed IOU
2. collateral backed on blockchain
3. elastic monetary supply based

***Tether (USDT) - fiat collateral***

***Market cap = more than 2 bil.USD***

Claiming that every USDT has one USD as reserve stored in Tether’s bank account. This guarantees Tether’s ability to redeem the legal currency at any time. Yet the model is 100% centralized because the company is in full control of the money supply and reserves. Because its US dollar reserve must be stored in regulated bank accounts, it is subject to government regulations. ***The most interesting thing is that the Bitfinex exchange, which, incidentally, controls the work of the company Tether Ltd, after the termination of cooperation with banks has incorporated and introduced the use of USDT, and managed to impose the dominance of USDT as the only stable coin for all other crypto exchanges.***

### **MakerDAO & DAI - crypto collateral**

**Market cap = about 500 mil.USD**

Maker is able to maintain the price stability of the Dai through the Dai Credit System, which backs the Dai with collateral stored in Ethereum smart contracts, while simultaneously functioning as an internet-based, p2p credit market that commoditizes credit by allowing anyone with valid collateral to take out loans that have low transaction costs and no middle man fees. Anyone can generate Dai on the Maker platform with a collateral value of twice Dai's Pooled Ether (PETH). **The most interesting thing is that the stable token DAI in practice has the role of ETH LONG leverage and in other words serves as some kind of ETH CALL Option.**

### **Basecoin - non collateral adjustment**

**Market cap = not active**

Basecoin uses a three-token model, which includes Base Share, Basecoin and Base Bond. The supply of Basecoin is elastic while the supply of Base Share is fixed. When the supply of Basecoin contracts, it triggers the Base Bonds to recycle and destroy the Basecoin. When the Basecoin supply expands, the new Basecoin repays the Base Bonds and the rest is assigned to the Base Shareholders. Three-token models present complex problems when traded on exchanges and implement network effect so they are not in public use yet. **The most interesting thing is that this project was first to include the supply-demand adjustment in the price stabilization process as well as "signorated share" principles.**

### **Havven (HAV) & nomin - crypto collateral**

**Market cap = about 30 mil.USD**

Havven is a decentralised payment network where transaction fees are collected from users of the network. These fees are allocated to collateral token holders, which is where the collateral token derives its value. There are two tokens in the system: havvens, the collateral token; and nomins, the stablecoin. Nomins are backed by havven tokens, as nomins can only be issued by locking havvens into a smart contract. Against the value of havvens a fraction of nomins can be issued, which ensures the network is overcollateralized and is resistant to price shocks. They establish the initial value of the system through a token sale. Because there are no transactions yet, participants in the sale are predicting the value of the Havven network, factoring in some risk premium. Collateral tokens are purchased on the basis that if the network grows and transaction fees increase, the value of the collateral token will increase and users will be rewarded for collateralising the system. **The most interesting thing is that this project will create a stable token exclusively with the supply and collateral of its own token that builds value based on the transaction fees.**

### **USDx - crypto collateral adjustment**

**Market cap = not active**

The project will roll out in two phases by Q2.2019. Phase 1) Tokens will be produced as Ethereum ERC20 tokens called USDx. Anyone can join USDx's ecosystem to contribute to the ICO. Phase 2) An independent public chain will be called USDy. Previous USDx token holders will be awarded USDy equal to their USDx, then enjoy "the ultimate stabilization reached by its self-balancing mechanism. After phase 2, USDx will implement intelligent algorithmic monetary control. The algorithm will adjust the total quantity of money in the economy (M). It will also adjust the velocity of money (V). Diversified mechanisms will adjust M and V. Those diversified mechanisms include a variable block reward, a mining lock, and a variable transaction fee. USDx is finite and does not have the self-balancing mechanism of a Stablecoin. USDx will be traded on the open market and the price will be free to rise and fall to reflect market expectations. **The most interesting thing is that this project will create own public blockchain based on proof of stake with high transaction speeds.**

**CP Processor (cPRO) & Stable Tokens+Supplements - crypto collateral adjustment  
Market cap = activating in Q2.2018**

CP Processor will go beyond all of the above mentioned projects in order to achieve a **higher goal - "world's single coin" with a global open payment protocol (GOPP)**. Also, CP Processor by default integrated almost all process and functions that we can find here. **The most interesting thing is that this project will link missing parts and use a synergy to create a new dimension of global payments, and the Stable Token System is just the first stage of that road.**

## 4. THEORY

### Stable Tokens NOT Convertible coins.

Convertibility is the quality that allows money or other financial instruments to be converted into other liquid stores of value. Convertibility is an important factor in international trade, where instruments valued in different currencies must be exchanged.

Freely convertible currencies have the immediate value on the foreign exchange market, and few restrictions on the manner and amount that can be traded for another currency. Free convertibility is a major feature of a hard currency. Convertibility first became an issue of significance during the time banknotes began to replace commodity money in the money supply. Under the contemporary international currency regimes, all currencies' inherent value derives from fiat, thus there is no longer any thing (gold or other tangible store of value) for which paper notes can be redeemed.

So, to have USD convertible coin it must be:

1. fully backed, 100% in fiat USD,
2. freely convertible,
3. changeable directly to fiat USD,

If we want to be fully backed in fiat USD currency we must work like Tether LTD does. But we do not want to be like Tether! We do not want to have full backing in fiat USD like Tether has, because of this >>>

COMPARATION	Decentralized	Open source	Public property	NO private Bank deposit	NO regulation	Do not need KYC	Do not need AML	NO Government supervision	Transparent	Public Audit	Algorithm Administration	Low cost process	Fast creation	Fast liquidation	NO Auto liquidation	RESULT
ST	👍	👍	👍	👍	👍	👍	👍	👍	👍	👍	👍	👍	👍	👍	👍	15
USDT	👎	👎	👎	👎	👎	👎	👎	👎	👎	👎	👎	👎	👎	👎	👍	1

Second option is to focus on **currency board** and fixed proportion. A currency board is an institution that issues currency that is freely convertible, at a fixed rate, into an external reserve asset. Also currency board must hold 100 percent foreign reserve ratio at the margin – not necessarily 100 percent total reserves. This results from the fact that a currency board cannot independently influence the money supply and cannot engage in any type of discretionary monetary policy, like we can not engage in USD money supply. A currency board is a monetary authority that maintains a fixed exchange rate with an anchor currency.

**STABILITY = fixed exchange rate +convertibility +high external reserve at the margin**



1) **fixed exchange rate can be  $ETH/USD=ETH/ST$**

Users can send when they want and how much they want ETH to personal conversion smart contract to change them for minted Stable Tokens ST.

2) **convertibility can be personal conversion on the smart contract ETH to ST and ST to ETH**

User can do buyback of all ETH on personal conversion smart contract by the same peer if he sends Stable Tokens ST to burn them on the smart contract and no one else can buyback his ETH.

3) **high external reserve at the margin can be**

**$ST=ETH+derivative1+derivative2...derivativeN$  on the smart contract**

Personal collateral smart contract gives every user personal liquidity by safe keeping input amount of ETH and preserving minted amount of derivative1, derivative2....derivativeN in the trusted smart contract custodian. The only challenge is to determine the derivatives.

**Economic conclusion:**

1. **Fixed proportion is not the same as fully backed,**
2. **Token cannot be fully backed, if it isn't 100% directly covered in fiat USD,**
3. **Token should not be fully backed to have the value of one USD,**

Therefore, we do not want full coverage but the focus is on a fixed proportion. Fixed proportion can be maintained if you constantly monitor the proportion of USD/ETH, and for that, you do not need full coverage, but you have to be careful of the speculations that are decreasing proportion.

**The solution lies in centralized personal conversion in a decentralized public smart contracts! Smart contract gives us TRUST. Personal conversion gives us LIQUIDITY.**

Stable Token System is fixed priced and liquid if every peer on the network have fixed exchange rate and reserve on the smart contract at all time. Only all peers together can make Stable Token in a trustworthy and distributed network like Ethereum. More about this Stable Token System is found in section 5.2, because the most complicated part is to actually to create Stable Tokens.

## **4.1. PERSONAL LOAN WITH LIFO COLLATERAL**

### **Simple way to create Stable Tokens.**

No matter where you are, the simplest way to come into possession of Stable Tokens is, of course, to borrow them. In order to personally borrow them, you only have to have a certain guarantee. What would be logical in the world of cryptocurrency is to guarantee and deposit a second crypto currency for borrowing the first at a negotiated proportion and on a decentralized network which can execute this for all users equally by using independent Smart Contract.

**In that way we get a Stable Token personal loan with LIFO collateral ETH , by the agreed proportion – repo rate. That represents the unique method for any user on Ethereum decentralized network to execute collateral of its ETH for Stable Token through the Smart Contract.**

This personal loan would be transacted by the agreed proportion, e.i. repo rate. In case that Stable Token is pegged to USD in proportion 1:1, then the repo price would be *iETH Price Index*  $iETH/USD$  and pegged exclusively for the specific user, that is, its public address. During this procedure, personal collateral would create-mint, through Smart Contract, specific number of new Stable Tokens, that would, in this case, automatically receive value 1:1 in relation to USD. In this initial process of creating Stable Tokens, converted value is the same as the value of USD, and it cannot be changed over time. With this procedure of initial creation, Stable Tokens confirm their fixed value that simultaneously represent the possibility to make payments with them for various goods and services.

The procedure of closing the personal loan position is simple and it creates the possibility to make a refund of borrowed Stable Tokens with the release of the guarantee – ETH stocked by the



LIFO method (last in first out). That means that the user can have multiple active personal loans, and perform closing starting from the last opened loan made at the repo rate and proportion that was valid on the public Smart Contract with the safe custodian that is not privately owned.

Characteristics of this theory are:

1. the system is always backed (the number of Stable Tokens minted is the same number that can be retrieved at any moment),
2. the system has neither a surplus nor a shortage, because it is based on a constant proportion of exchange and not on a collateral.
3. market cap of the collateral would not be calculated by the current market rate but as a sum of all personal collateral prices.
4. expiration date of the loan would be unlimited as well as the amount that can be borrowed.
5. the price of Stable Tokens is derived based on the constant proportion of trade volume ETH/USD and is expressed in proportion ST/ETH, which means that ST:USD is always 1:1 at each calculation of the loan,
6. If a user performs a loan repayment, he executes a buyback of the personal collateral ETH which is calculated by the LIFO method, and therefore in every future moment there is a personal extra gain or loss,
7. Personal extra gain happens if the current market trade volume ETH/USD is bigger than the one calculated at the moment of personal loan ST/ETH ( $ETH/USD - ST/ETH = \text{personal extra gain}$ ).
8. Personal extra loss happens if the current market proportion of ETH/USD is smaller than the one that is calculated at the moment of the personal loan ST/ETH ( $ST/ETH - ETH/USD = \text{personal extra loss}$ )
9. According to this theory, stability is always guaranteed 1:1, but the client has to additionally pay for the extra loss or to receive extra gain at the time of the loan repayment.

#### **TECHNICAL PART:**

The realization of a personal loan is carried out on the Ethereum decentralized network with the help of **Smart Contract Personal ETHLoan.sol** by calling the function Fallback which further enables sending ETH from a wallet or from other Smart Contract. This function will receive from a client ETH amount at the current value **iETH/USD** (Price Index Ethereum in relation to USD), which is read from Trust Oracle, and execute minting and sending Stable Tokens ST back to the client's address. That allows client to execute multiple personal collaterals and also execute closing its own collaterals.

Personal collateral is possible to make with limitless amount of ETH because there is no limit for minting Stable Tokens. Also, closing the personal collateral is possible if a client sends certain amount (currently calculated) Stable Tokens to the same Smart Contract, on function Take from Personal Loan ETH, and by doing that initiates the process of return of collateral ETH. Personal collateral is closed by the current rate **iETH/USD** expressed in Stable Tokens ST.

In case of the personal loan, safety of the conversion is guaranteed and there is no automatic liquidation of the collateral, because Smart Contract returns the amount of ETH it received from the user and takes back the amount of Stable Tokens by the current rate and burns them.

### **4.3 BURN VALUE**

#### ***The most controversial way to create a Stable Token.***

How does money get value? Given that the notion of money is related exclusively to people and human-centered system, human psychology and belief play a major role in this. That is why there are two quite simple options in circulation, GUARANTEE and CONSENSUS.

So a Guarantee (or a collateral that has its own guarantee) can make money and give him a value out of nothing. Implicitly one value goes to another, and so the object that guarantees transfer his value to the subject-money. Burn value theory, in fact, guarantees that a certain "object value" is

spent on creating another “subject value”, but in an explicit manner. This literally means that the value is never lost as the Energy, and that the change of the "aggregate state" shifts from one form to another and allows the creation of the value of new money from the old.

***Burn one value and mint another in the same proportion is the basis of the Burn value theory that can serve to create new forms of money or crypto coins.***

A possible symbolism that is clearer to the crypt community would look like this:

1. The PoW network has operating costs for mains, which are expressed in fixed costs (hardware price) and variable costs (electricity price)
2. The cost price of the newly minted crypto coins is therefore equal to the fixed + variable cost of miners.
3. The value of the newly created crypto coin should therefore be greater or equal to the cost price, otherwise the costs would be higher than the revenue and the mining would be extinguished.
4. So we arrive to the knowledge, where the basic value of the new created crypto coin arises? It comes from the ***burned value of electricity*** (consumed and invested)+ hardware price.

## 5. CP PROCESSOR

### *What is it?*

Coin Payment Processor is an idea for helping the evolution of money in the 21st century through an open consortium of companies and people. By using latest technical advances, open source development and with the open mindedness of the society this goal becomes attainable and realistically achievable.

### 5.1 PRICE INDEX

#### ***Free, Open source crypto Price Indexes.***

A price index (plural: “price indices” or “price indexes”) is a normalized average (typically a weighted average) of price relatives for a given class of goods or services in a given region, during a given interval of time. It is a statistic designed to help to compare how these price relatives, taken as a whole differ between time periods or geographical locations.

Price indexes have several potential uses. For particularly broad indexes, the index can be said to measure the economy's general price level or a cost of living. More narrow price indexes can help producers with business plans and pricing. Sometimes, they can be useful in helping to guide investment.

Coin Payment Processor Project uses the best models and practices for measuring, and calculates the price indexes for the popular crypto coins. The goal is to make the first standardized crypto price indexes which will be free and open sourced for all crypto community and more.

The price index of a cryptocurrency is calculated based on the Relevant Transactions on all Representative Exchanges. Calculation steps for the iBTC (Bitcoin price index), for example, on any given Calculation Day are as follows:

1. All Relevant Transactions are added to a raw database, recording the trade price and size for each transaction.
2. The data is partitioned into 6 equally-sized time intervals of 10 seconds each.
3. For each partition separately, the volume-weighted median trade price is calculated from the trade prices and sizes of all Relevant Transactions, i.e. across all Representative Exchanges.
4. A volume-weighted median differs from a standard median in that a weighting factor, in this case trade size, is factored into the calculation.
5. The iBTC is then given by the equally-weighted average of the volume-weighted medians of all partitions.

## 5.2 STABLE TOKEN SYSTEM

### *Introduction to future CP Processor Stable Tokens&Supplements.*

STABLE TOKENS SYSTEM WITH PERSONAL LOAN & CONVERSION

#### **USD = dollar fiat currency**

Dollar fiat currency = USA federal bank minted convertible coin.

Guaranteed by federal bank obligation.

#### **USDT= tether coin**

Tether coin = Private property convertible coin minted on public Omni network.

Guaranteed by private company USD fiat deposit in private bank.

#### **ETH = ethereum coin**

Ethereum coin = PoW convertible coin minted on public Ethereum network + can be burned.

Guaranteed by community consensus on distributed ledger.

#### **DoES = Short Ethereum Smart contract token**

Short Ethereum Smart contract token ( ERC20) minted with smart contract functions on public Ethereum network,

Guaranteed by community consensus on smart contract on Ethereum network.

#### **UpES = Long Ethereum Smart contract 2x token**

Long Ethereum Smart contract 2x token (ERC20) minted with smart contract functions on public Ethereum network,

Guaranteed by community consensus on smart contract on Ethereum network.

#### **STABLE TOKENS:**

##### **DoTo= dollar token**

##### **EuTo= euro token**

##### **KrTo= won token**

##### **YeTo= yen token**

##### **YuTo= yuan token**

*ERC20 tokens minted with smart contract functions on public Ethereum network,*

*Guaranteed by personal ETH & ERC20 tokens change (collateral + conversion) on smart contract custodian on Ethereum network.*

#### **Goal of Stable Token System is the following:**

MarketCap DoTo=MarketCap CollateralETH + SUM MarketCap Supplements

#### **Basic conditions for creating Smart Contracts are the following:**

##### **Personal conversion.sol**

- 1) deposit can be made in ETH, listed ERC20 token or DoTo,
- 2) for collateral ETH or listed ERC20 you get only DoTo, you cannot get DoES or UpES
- 3) for collateral DoT you get DoES or UpES, you cannot get ETH,
- 4) back ETH is done by the exchange rate of iETH/USD, in case of a shortage of DoTo, the difference still remains in collateral,
- 5) buyback ETH is done by the exchange rate of iETH/USD, in case of excess of DoTo, a user is offered supplements, for investing excess of DoTo in buying DoES and UpES or investing in Di\_ and In\_ (variations with secure income),
- 6) so the condition for minting DoES or UpES is that a user buys back ETH and have currently accounted SUM excess DoTo, and only for that excess DoTo he can take offered supplements,
- 7) so there is NO free minting of DoES and UpES, their supply-offer and market cap are limited (they have two conditions for creating)
- 8) if a user buys DoES with excess DoTo, then DoTo is considered as a collateral and DoES is minted by calculation formula on the Smart Contract itself,
- 9) if a user buys UpES with excess DoTo, then DoTo is considered as a collateral, and UpES is minted by calculation formula on the Smart Contract itself,

### ***DoTo.sol***

- 1) unlimited ETH deposit mints unlimited amount of DoTo
- 2) limited DoES buyback mints DoTo maximally for the SUM of all sold (minted) DoES for personal address of a user
- 3) limited UpES buyback mints DoTo maximally for DoTo paid for the SUM of all sold (minted) UpES for personal address of a user
- 4) no free or group exchange of DoES or UpES for DoTo, only on two conditions + connected to personal address
- 5) excess DoTo can be turned into DoES or UpES and then it becomes personal collateral
- 6) excess DoTo is calculated on the personal conversion contract every time a user does buyback ETH and in a way that personal ETH  $(q_1+q_2+q_n) \cdot iETH/USD$  is subtracted from the real balance of DoTo for a user (total amount of minted DoTo minus returned DoTo from a user).

### ***DoES.sol***

- 1) only current excess DoTo mints DoES (calculation is done for personally issued sum.doto divided by sum.eth of users on contract and if there is sum.doto excess, you get current offer for buying DoES, no matter how much eth buyback a user is doing)
- 2) no direct ETH deposit for DoES (only indirectly through DoTo and with the condition of excess)
- 3) when user does buyback DoTo that was collateral for minting DoES, he can get only as much DoTo as he has personally pledged, and calculation is done by the current rate of DoES on the contract (that means that the DoTo difference that he may have earned has to be liquidated on the market - selling DoES for DoTo, then DoTo for ETH, and then ETH for USD)
- 4) repo rate is determined upon deployment = current price  $iETH/USD$  is taken, and further value of DoES is calculated directly on the contract by formula
  - a.  $ETH/DOTO_n = (1+X\%) \times ETH/DOTO_{n-1}$
  - b.  $SES/DOTO_n = SES/DOTO_{n-1} / (1+X\%)$

### ***UpES.sol***

- 1) only current excess of DoTo mints UpES (calculation is done for personally issued sum.doto divided by sum.eth of users on contract and if there is sum.doto excess, you get current offer for buying UpES, no matter how much eth buyback a user is doing)
- 2) no direct ETH deposit for UpES (only indirectly through DoTo and with the condition of excess)
- 3) when user does buyback DoTo that was collateral for minting UpES, he can get only as much DoTo as he has personally pledged, and calculation is done by the current rate of UpES on the contract (that means that the DoTo difference that he may have earned has to be liquidated on the market - selling UpES for DoTo, then DoTo for ETH, and then ETH for USD)
- 4) repo rate is determined upon deployment = current price  $iETH/USD$  is taken, and further value of UpES is calculated directly on the contract by formula
  - a.  $ETH/DOTO_n = (1+X\%) \times ETH/DOTO_{n-1}$   
 $SES/DOTO_n = SES/DOTO_{n-1} / (1+X\%)$

## **5.2.1 STABLE TOKENS**

***DoTo, EuTo, KrTo, YeTo, YuTo***

**STABLE TOKENS = ETH & ERC20 TOKENS COLLATERAL +  
(ETH & ERC20 TOKENS CONVERSION + SUPPLY-DEMAND ADJUSTMENT BY SUPPLEMENTS)**

**THE SYSTEM IS IN BALANCE 1:2**

***DoTo <= 2x totalcollateralETH+totalcollateralTOKENS+totalconvertcollateralSUM***

**SYNTAX:**

*totalSupply= total amount of stable tokens minted (e.g. DoTo SUM)*

*totalCollateralConvertibles= total amount of stable tokens minted through personal collateral (for example DoTo SUM of personal collateral)*

*totalConversionETH= cumulative amount of collateralized ETH through personal conversion recalculated to the current value of a specific stable token (for example, current DoTo SUM of collateralized ETH through personal conversion)*

*totalConversionTOKENS= cumulative amount of collateralized TOKENS through personal conversion recalculated to the current value of a specific stable token (for example current DoTo SUM of collateralized TOKENS through personal conversion)*

*totalConvertCollateralSUM= cumulative collateral of a specific stable token when buying ETH supplements DoES and UpES (for example, cumulative collateral DoTo SUM for buying UpES and DoES)*

- ❖ fee 0,20%(in ETH) when ETH is stored
- ❖ fee 0,20%(in ETH) when ETH is released
- ❖ fee 0,01%(in ETH) daily for personal collateral, when repurchased

**Conditions MINT:**

- ✓ personal, collateral is made - ETH collateral, then DoTo is minted and mapped by using LIFO method
- ✓ personal, conversion is made - ETH conversion, then DoTo is minted and mapped the total amount of stored personal conversion for repurchasing
- ✓ global primary, we mint DoTO and buyback UpES, DoES and then burn them, first IN first SERVED

$$(TotalSupply - TotalCollateralConvertibles!) \times 2,50 \leq$$

$$(TotalConversionETH + TotalCollateralTOKENS + TotalConvertCollateralSUM)$$

- ✓ global, we mint DoTo and buyback DiDo and then burn them, first IN first SERVED

$$(TotalSupply - TotalCollateralConvertibles) \times 2,30 \leq$$

$$(TotalCollateralETH + TotalCollateralTOKENS + TotalConvertCollateralSUM)$$

- ✓ personal, we mint DoTO to pay for interest and principal, and personal contract maps only the amount and time of collateral, LIFO method

$$personal\ DoTo \times 2,00 \leq$$

$$(personalETHcollateral + personalTOKENScollateral + personalDoTo\ collateral)$$

**Conditions BURN:**

- ✓ personal, DoTo is returned by LIFO method, and ETH collateral is repurchased
- ✓ personal, DoTo is returned by current price and ETH conversion is released
- ✓ global primary, allows everyone with DoTo to buy ETH supplements, first IN first SERVED

$$total\ supply \geq$$

$$0,40 \times (totalcollateralETH + totalcollateralTOKENS + totalconvertcollateralSUM)$$

- ✓ personal secondary - only personal is possible

$$personal\ DoTo \geq$$

$$0,40 \times (personalETHcollateral + personalTOKENScollateral + personalDoTo\ collateral)$$

- ✓ global, allows everyone with DoTo to buy stable tokens supplement DiDo, first IN first SERVED

$$total\ supply \geq$$

$$0,45 \times (totalcollateralETH + totalcollateralTOKENS + totalconvertcollateralSUM)$$

- ✓ personal, allows only personal collateral DoTo, LIFO method

$$personal\ DoTo \geq$$

$$0,50 \times (personalETHcollateral + personalTOKENScollateral + personalDoTo\ collateral),$$

- ✓ DoTo collateral is BURNED, we map only amount and time for personal address

## 5.2.2 FOREX

### Stable token exchange

Forex change on smart contract by ETH price index proportion (20x):

- ❖ fee 0,10%(in stable tokens) when converted

**Formula ---  $iETH/USD : iETH/EUR = DoTo : EuTo$**

*DoTo/EuTo, DoTo/KrTo, DoTo/YeTo, DoTo/YuTo,  
EuTo/DoTo, EuTo/KrTo, EuTo/YeTo, EuTo/YuTo,  
KrTo/DoTo, KrTo/EuTo, KrTo/YeTo, KrTo/YuTo  
YeTo/DoTo, YeTo/EuTo, YeTo/KrTo, YeTo/YuTo,  
YuTo/DoTo, YuTo/EuTo, YuTo/KrTo, YuTo/YeTo,*

## 5.2.3 ETH SUPPLEMENTS

### UpES, DoES

**UpES = up2x ethereum smart contract token (global&personal)**

**DoES = down ethereum smart contract token (global&personal)**

ERC20 tokens minted with smart contract on public Ethereum network.

Guaranteed by personal ETH collateral on smart contract custodian on Ethereum network.

- ❖ fee 0,40%(in DoTo) for storing DoTo, UpES or DoES
- ❖ fee 0,40%(in DoTo) for releasing DoTo, UpES or DoES

Calculated by formula on smart contract :

$ETH/DOTO\_n=(1+X\%)xETH/DOTO\_n-1$   
 $DoES/DOTO\_n=DoES/DOTO\_n-1 / (1+X\%)$   
 $ETH/DOTO\_n=(1+X\%)xETH/DOTO\_n-1$   
 $UpES/DOTO\_n=UpES/DOTO\_n-1 x (1+2X\%)$

ETH supplements must have equal market cap +-5%

$DoES.Cap = totalSupply(DoES) x price(DoES),$   
 $UpES.Cap = totalSupply(UpES) x price(UpES),$   
if  $DoES.Cap \leq 1.05 x UpES.Cap$  then  $DoES.MINT$   
if  $UpES.Cap \leq 1.05 x DoES.Cap$  then  $UpES.MINT$

### Conditions MINT:

- ✓ global primary, allows everyone with DoTo to buy ETH supplements, first IN, first SERVED  
**total supply >=**  
 **$0,40x(totalcollateralETH+totalcollateralTOKENS+totalconvertcollateralSUM)$**
- ✓ personal secondary - only personal is possible  
**personal DoTo >=**  
 **$0,40x(personalETHcollateral+personalTOKENScollateral+personalDoTo collateral)$**
- ✓ DoTo is BURNED, and UpES and DoES are minted

### Conditions BURN (buyback):

- ✓ global primary, we mint DoTO and buyback UpES, DoES and then burn them, first IN, first SERVED  
**total supply  $x2,50 \leq$**   
 **$(totalcollateralETH+totalcollateralTOKENS+totalconvertcollateralSUM)$**
- ✓ personal secondary - NO, the amount of collateralized DoTo is the amount that can be repurchased  
**personal DoTo  $x2,50 \leq$**   
 **$(personalETHcollateral+personalTOKENScollateral+personalDoTo collateral)$**



## 5.2.4 STABLE TOKENS SUPPLEMENTS

*Di\_, In\_*

**Di\_ = discount smart contract token x5 (global, fix income +3%)**  
ERC20 tokens minted with smart contract on public Ethereum network.  
Garanted by smart contract function on Ethereum network.

- ❖ fee 0,10%(in DoTo) when DoTo is stored
- ❖ fee 0,20%(in DoTo) when DoTo is released

**Calculated by formula on smart contract : DoTo=DiDo x 1.03**

### Conditions MINT:

- ✓ global, allows everyone with DoTo to buy stable tokens supplements DiDo, first IN, first SERVED

**totalSupply >=**

**45x(totalEth + totalTokens + totalCollateralConvertibles) / 100**

- ✓ DoTo is BURNED, and DiDo is minted

### Conditions BURN (buyback):

- ✓ global, we mint DoTo and buyback DiDo, and then we burn them, first IN, first SERVED

**totalSupply x23/10<=**

**(totalEth + totalTokens + totalCollateralConvertibles)**

**In\_ = interest smart contractx1 for 5 (personal, variable 0.01%day)**

Not token, only smart contract function.

Guaranteed by smart contract function on Ethereum network.

- ❖ fee 0,10%(in DoTo) when DoTo is stored
- ❖ fee 0,20%(in DoTo) when DoTo is released

**Calculated by formula on smart contract: InterestCollateral=DoTo collateral x 0,01% x days**  
(FIFO - first in first out calculation, Interest is paid with DoTo that we mint)

### Conditions MINT:

- ✓ personal, allows only personal collateral DoTo, FIFO method

**personal DoTo >=**

**0,50x(personalETHcollateral+personalTOKENScollateral+personalDoTo collateral)**

- ✓ DoTo collateral is BURNED, we only map amount and time for personal address

### Conditions BURN:

- ✓ personal, we mint DoTO to pay for interest and principal, and personal contract only maps amount and time, FIFO method

**2x personalConvertibles >=**

**(personalEthValue + personalTokensValue + convertiblesCollateralValue)**

**personal DoTo x2,00 <=**

**(personalETHcollateral+personalTOKENScollateral+personalDoTo collateral)**

- ✓ DoTo is MINTED and principal with calculated personal interest is returned together
- ✓ anyone can read the contract and see the mapping of balance, how much interest each address has



## 5.3 PAYMENT PROCESSOR

### *The End of plastic card era.*

Today payment processor is a third party appointed by a merchant to handle transactions from various channels such as credit cards and debit cards for merchant acquiring banks. The typical network architecture for modern online payment systems is a chain of service providers, each providing unique value to the payment transaction, and each adding cost to the transaction:

**Merchant ↔ point-of-sale (PoS) + software as a service (SaaS) ↔ aggregator ↔ credit card network ↔ Bank ↔ Client**

The PoS provider transaction volumes are small compared to the aggregator transaction volumes, so a direct connection to the major credit card networks is not warranted, because of the low traffic. Additionally, the merchant does not handle enough traffic to warrant a direct connection to the aggregator. In this way, scope and responsibilities are divided among various business partners to easily manage technical issues that arise.

Also, electronic payments are highly susceptible to fraud and abuse. Due to the many regulatory requirements levied on businesses, the modern payment processor is usually process single and recurring credit card payments (without the merchant storing the card data at the merchant site), process single and recurring ACH and cash transactions, process remittances and Web payments. Some payment processors also specialize in high-risk processing for industries that are subject to frequent chargebacks.

All these problems can be resolved with the use of a different technical approach.

Instead of chain of service providers, there can be only one universal provider - decentralized network that, in fact, provides direct communication P2P between Merchant and Client.

**Merchant ↔ P2P by decentralized network ↔ Client (or client custodian)**

Evolution in payment processing would bring benefits such as reduction in number of intermediaries, reduction of transaction costs and more secure transactions.

Establishing a unique system for payment process that is not privately owned and represents the result of open source community engagement would definitely contribute to the bigger economical and trade progress of mankind, and all that without discrimination or favouritism. On the other hand, the result of this advancement would definitely create a large number of adversaries that will lose their current prestige role (Visa, MasterCard...).

CP Processor project has a goal to build its architecture on principles of open source micro services back-end software. While the front-end application part would be the result of a free community work and many different approaches. One of the first front-end applications would have the following characteristics:

Client APP functionality :

- 1) The possibility of registering multiple types of accounts, switching from type to type,
- 2) Joint account for many different users and administrators,
- 3) Existence of several layers of protection when logging,
- 4) Simple display of account balance and display of changes in the account in real time,
- 5) Offline synchronization of account balance and transactions,
- 6) Multiple levels of confirmation and security while transacting,
- 7) Push notifications,
- 8) Possibility of choosing a large number of languages for work,
- 9) Integrated system of comments and ratings of sellers,

Biz APP functionality:

- 1) Internal delegation of the level of protection and authorization to different accounts,
- 2) Different types of money box/payment sites/ and their administration,
- 3) Integrating money boxes on web/within social networks
- 4) Creating different types of sub accounts,
- 5) Advanced statistics on the sale and payment of products and services to individuals,
- 6) Advanced statistics on the sale and payment of products and services to companies,

**Application would have 4+2 parts::**

- 1) e-wallet (safe repository for storing crypto currencies),**
- 2) convert (internal conversion of crypto currencies&stable tokens)**
- 3) processing (system for transferring crypto currencies through different media and in different states - online/offline with the help of full range of different payment methods)**
- 4) administration (standard system for monitoring work and configuring functionalities of the platform)**
- 5) messaging\*optionally (integrated external messaging platform like Telegram messaging client)**
- 6) forum\*optionally (integrated custom forum for buy, sell and change locally by physical people, something similar to local bitcoins only for stable tokens)**

#### **1. e-wallet**

- 1.1. possibility to store multiple crypto currencies, ETH & ERC20 storage (open source wallet)
- 1.2. possibility of multiple types of user accounts:
  - 1.2.1.mini
  - 1.2.2.maxi
  - 1.2.3.family - joint
  - 1.2.4.pro
  - 1.2.5.merchant
  - 1.2.6.sub accounts - dedicated sub accounts
  - 1.2.7.fund - collection account

#### **2. convert**

- 2.1. user exchanges ETH and other ERC20 tokens for Stable Tokens,
- 2.2. seller-merchant exchanges Stable Tokens for ETH or other ERC20 tokens,
- 2.3. user converts internal currencies inside the system

#### **3. processing**

- 3.1. transfers
  - 3.1.1.on line
    - 3.1.1.1. by smartphone app
    - 3.1.1.2. by email
    - 3.1.1.3. by messaging
    - 3.1.1.4. by sms
  - 3.1.2.off line
- 3.2. payments in – to merchants
  - 3.2.1.QR code
  - 3.2.2.button
  - 3.2.3.box
  - 3.2.4.symbol
  - 3.2.5.hyperlink
  - 3.2.6.subscribe
- 3.3. payments out – all users
  - 3.3.1.bullk
  - 3.3.2.future
  - 3.3.3.escrow

#### **4. client admin panel**

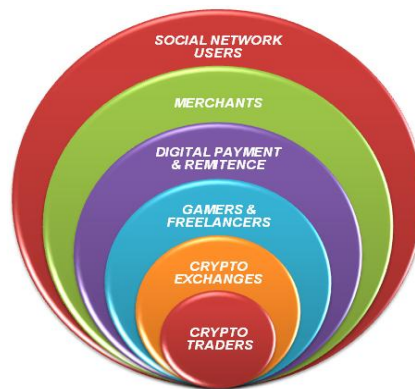
- 4.1. History
- 4.2. Statistics
- 4.3. Analytics by time, value
- 4.4. To do
- 4.5. Alarms
- 4.6. Notifications

## 5.4 CPRO TOKEN

### *Utility membership token*

Functionality or utility seems to be the key characteristic that distinguishes a “blockchain token” from a financial security. A token which has a specific function that is only available to token holders is more likely to be purchased in order to access that function and less likely to be purchased with an expectation of profit. So, cPRO token represents user's “ticket” to the functionality and usability of CP Processor Project on the public Ethereum network. Without this “ticket” CP Processor cannot function in full. So, every user must have exactly = 1,00 cPRO token to use CP Processor functions. Also, this token does not represent stock or investment asset and project does not guarantee for the market price and future open market trade. But if demand for tokens rises much more than fixed supply, because no one can know how many token users there will be in the future, the demand will increase the token price.

***This token does not represent stock or investment asset, and no government in the world can forbid you to take a cinema ticket so they cannot forbid you to take a cPRO “TICKET”!***



1. CP Processor future users

cPro token have one more specific feature... it is a **FAIR DISTRIBUTION, without price, without discount, without pre-sale..** It is a 40 days long FAIR DISTRIBUTION for all participants. We use Dutch Auction method for transparent token distribution. At the end of the auction ALL 35.000.000 cPRO tokens will be distributed proportionally to ALL participants with ETH deposit. All participants are equal, no matter the amount of ETH they send or the time when they send it.

Special feature of cPRO token is also that the collected fee on CP Processor smart contracts is used for Buyback of cPRO tokens. So in the future all collected fees in CP Processor project will be distributed not to private companies but to cPRO token holders by buyback function on decentralised smart contract.

### **How it looks in numbers :**

- *Limited amount of cPRO (ERC20) tokens is minted*
- *cPRO SUM =100.000.000 pcs.*
- *First Token distribution of =35.000.000 pcs. STARTS on 2018.04.04. ENDS on 2018.05.14.*
- *35% takes First Token distribution in Q2.2018*
- *35% takes Second Token distribution in Q2.2019*
- *30% takes Open Consortium in 2018.& 2019.*

**The CP Processor project roadmap is simple as this “don’t talk, just work” :**

- ✓ **Q3.2014 - Creating the idea “Focus on payments”**
- ✓ **Q3.2017 - Open consortium starts gathering**
- ✓ **Q4.2017 - Project development starts**
- ✓ **Q1.2018 - Public distribution of Price Indexes**

- ✓ Q2.2018 - Public distribution of Ethereum Stable Tokens and Supplements
- ✓ Q2.2018 - Web extension CP Processor V1.0
- ✓ Q2.2018 - First cPRO token distribution
- ✓ Q2.2018 - Smartphone App CP Processor V1.0
- Q4.2018 - Public distribution of Liberty coin
- Q1.2019 - Implementation of fast payment processing Web extension V2.0
- Q1.2019 - Implementation of fast payment processing smartphone App V2.0
- Q1.2019 - Second cPRO token distribution
- 2019. - Project and processes maintenance

### **Open Consortium - Society for Open source software development**

CP Processor Open Consortium is an association of all individuals, companies, organizations or governments (or any combination of these entities) with the objective of participating in a common activity or pooling their resources for achieving a common goal, **to develop and support Coin Payment Processor Project.**

Consortium is a Latin word, meaning "partnership", "association" or "society" and derives from consors 'partner', itself from con-'together' and sors 'fate', meaning owner of means or comrade.

### **Open Consortium = Open Society**

Open Consortium will have its body - Committee with 14 members and President. The role of committee will be to make the strategy and future actions in development of this project.

### **Open Consortium in numbers :**

- 15% reward in cPRO tokens to GOLD partnership program (3 participants)
- 10% reward in cPRO tokens to SILVER partnership program (10 participants)
- 1% reward in cPRO tokens to BRONZE partnership program (unlimited participants)
- 2% Bounties
- 2% Administration of consortium

## **6. THE FUTURE**

### ***Step by step working***

***Our first goal is to eliminate the problem of “cryptocurrency as money” that derives from stability of cryptocurrencies. To be more precise, we want to introduce Stable Tokens in everyday use to the whole crypto community and further, because, as we previously concluded:*** What is imposed as a general conclusion is that current cryptocurrencies have no money role and are not generally accepted for settlement of liabilities. One of the reasons for this is that users see them as an investment opportunities that have absolutely no external stability, not even a floating exchange rate. By resolving this problem, there would be more use of cryptocurrencies as money for payment and settlement.

***Our second goal is to resolve the problem of “decentralized universal currency” that would improve global economy and trade. To be more precise, we want to introduce the “world’s single coin” in everyday legal use all around the world, because, as we previously concluded:*** Obvious and general conclusion is that current global currencies generally have no stability, neither externally, nor internally. One of the reasons for this is that people manage them centrally and subjectively, and by removing that state, there is a possibility for the increase in stability.

***Our third and final goal is to resolve the issue of “open international payments” that haven’t evolved enough. To be more precise, we want to introduce the “Global Open Payment Protocol” and create a new dimension of global payments, because, as we previously concluded:*** The obvious general conclusion is that currently the globalization phenomenon has not improved nor enhanced the system of international payments outside the borders of one country. One

of the reasons for this is that too many different bureaucratic demands and intermediaries stand in the way of open international payments. By resolving this problem, there would be a simpler service for global payments and settlement of money transactions.

## **6.1 LIBERTY COIN (LIBE)**

### ***World's single coin***

The supranational currency unit, of which the Euro is so far the only example, is a rather unique creation. While the 2008 financial crisis was playing out, the governor of the People's Bank of China, proposed remedying the currently flawed system by establishing a global super sovereign reserve currency, modeled on Keynes Bancor. Specifically, he advocated the expansion of the use of IMF Special Drawing Rights and the creation of settlement mechanisms to facilitate this aim. These ideas generated considerable enthusiasm among academics, as well as policy makers, and leaders meeting on April 2009 at G-20 London summit did agree to allow for USD 250 bn of SDRs to be created by the IMF and distributed to members, according to each country's voting rights. This was seen as a step towards establishing the SDR as a truly global currency.

As it appears unlikely that the international community will be able to realize the kind of political integration required to remedy the issues facing the international monetary order, it is only natural that non-governmental experts should step into the void and offer potential solutions. There is a promising concept in the ***standardized currency basket of national fiat currencies***. Transparency and auditing as a major issue can be resolved by public audit with the smart contracts on the decentralized network. However, due to the fact that its holdings are diversified, a basket holder would retain value even in the case of the currency crisis within a constituent currency. Basket holders would only risk losing the weighting of that particular currency within the basket.

Another strong benefit is reduced volatility. As the basket is weighted average of the value of the constituent currencies at any time, value is generally more stable and consistent than that of any particular constituent currency relative to holding a single currency. For international companies who generate income across borders this is the key. An international food company may procure raw goods in one country, process it in another and sell it in third, all the while having its seat and main - stock listing in fourth. Although it remains a challenge to entirely mitigate this operations' exposure to the whole chain of bilateral currency value uncertainties, the company would certainly decrease uncertainty if it were to account, plan, analyze costs and most fundamentally think in terms of ***units of basket***. The advantages for commodity producers are also apparent. Whilst they may currently use the futures markets in order to lock in a certain amount of predictable profits, the cost of hedging currency exposure is often extremely high, especially in countries where the national currency is not among the most widely traded. Listing commodity futures in terms of basket units allows for the benefit of reduced volatility to transpire into a more predictable future-effective value of commodities trade.

***Another benefit of the standardized currency basket is that it can be deployed and used today. International political agreement is not required.***

Therefore, it can only be hoped that a standardized basket of fiat currencies rapidly gains momentum and becomes widely understood and used. The benefits of reduced volatility and increased reliability become increasingly easily accessible the wider the basket is deployed. Eventually, it could be feasible to see transactions where the constituent currencies are bypassed altogether as deals are priced and settled in terms of basket units. Basically, with such basket arrangement, the more it is used, the more useful it becomes.

### ***LIBERTY COIN = WORLD'S CURRENCY UNIT***

In order to retain value certainty and allow for ongoing exchange of basket units, the basket would have to be composed according to a set of algorithm rules. The LIBERTY COIN will be a standardized, apolitical, basket currency derivative quotation based on the exchange rates of the currency pairs of the world's Top 10,20 or 30 nations as determined by IMF measures of GDP.

Liberty Coin quotations will be delivered across decentralized Ethereum network and the Internet in real time from the unique LIBE algorithm which inputs trading prices of currency pairs from a broad spread of global sources.

***The LIBE, its constituent currency pairs weighted in line with GDPs, is a generally less volatile currency unit than traditional currency pairs.***

The LIBE balances and stabilizes currency risk, offering commercial advantage compared to the traditional use of the USD to denominate international trade, acting as a natural currency shock absorber. It is applicable to most cross currency transactions and particularly international commodity trading. USD agnostic (the USD simply forms a weighted component of the LIBE) the LIBE can offer sovereign nations an alternative to the USD to price commodity exports and a standardized reference for holding currency reserves.

## **6.2 COIN LEDGER**

### ***World's single coin protocol***

Beside all technical advances that Bitcoin and Ethereum brought to us, at the moment there is one major problem - STABILITY. With growing number of users, there is an exponential growth in number of transactions on the decentralized network that has its physical limitations. The capacity and speed of transactions are not even close to suffice the needs of a serious payment network. But of course, every problem has a solution, or multiple solutions. There are currently in development: lightning layer, sharding networks, PoS combination with PoW and others. We hope that one of them will soon provide satisfactory results. Our goal is to start developing our own protocol at the same time as the others are developing theirs. In that way, whichever protocol proves its worth in future, it will be for the general benefit of the entire community.

Coin ledger concept has a goal to execute large number of transactions (over 100.000 txn/sec) on a safe network that would be minimally compatible with the existing blockchain technologies. This new system would have a built-in Expert Coins that cannot be produced outside the system, nor inserted subsequently. Also, Expert Coins will be able to mint and burn under strict and specific conditions. Expert coin also means that each coin is smart, knows its current owner, previous and future owner and always have a trail of transactional history. Coin ledger concept would basically be a sequential blockchain without PoW, PoS, super Node, but with a system of confirmation ***PoA - PROOF OF AUTHORITY.***

Unfortunately, lately we are witnessing that multinational companies massively invest in development and application of new blockchain technology and that they protect each progress with patented rights and licenses (PayPall, Bank of America...) That is the only reason why we want to keep this part of the project in "stealth mode" until it is finalized and ready for the public beta test. We don't want to give advance ideas for free to multinational companies, because they can easily steal our idea and concept. With massive resources that they possess, they could easily finish this concept and, in the end, patent it as their own.

## **6.3 CHALLENGE**

### ***Have you ever wondered what is in fact MONEY?***

#### ***Money is the universal measure of value.***

There is a similarity with the term TIME which we use daily without thinking of its essence and complexity. Therefore, we can freely claim that a second is a universal measure of time which is standardized and commonly accepted on the planet Earth (maybe it is different on some other planet?!) No matter how complex the term of time and its measurement are (absolute time, relative time...), through social-economic development, man has realized that there is a need for a global standard and he has created it. Therefore, today's generations have no problems in that field and they do not dwell on the notion of universal measure of time.

Why would it be any different with the term MONEY? Do you see the need for a global standard and universal money - „world single coin“? Can we, and are we ready to implement a standardized measure of value – global money?



***The universal measure of time on the planet Earth is standardized and uniform, while the universal measure of value - MONEY is neither standardized nor uniform... it is time for the evolution. I believe that we are finally technically ready and that this particular project goes in that direction. So join us, support this idea and project, be an active participant in creating your own future, and not just a pessimist without vision.***

## 7. REFERENCES

- 1) <https://bitcoin.org/bitcoin.pdf>
- 2) <https://github.com/ethereum/wiki/wiki/White-Paper>
- 3) <https://makerdao.com/whitepaper/DaiDec17WP.pdf>
- 4) [http://www.getbasecoin.com/basecoin\\_whitepaper\\_0\\_99.pdf](http://www.getbasecoin.com/basecoin_whitepaper_0_99.pdf)
- 5) [https://havven.io/uploads/havven\\_whitepaper.pdf](https://havven.io/uploads/havven_whitepaper.pdf)
- 6) <https://usdx.money/whitepaper/USDx%20Whitepaper.pdf>
- 7) <https://bravenewcoin.com/assets/Whitepapers/A-Note-on-Cryptocurrency-Stabilisation-Seigniorage-Shares.pdf>
- 8) [https://en.wikipedia.org/wiki/Price\\_index](https://en.wikipedia.org/wiki/Price_index)
- 9) <https://en.wikipedia.org/wiki/Convertibility>
- 10) [https://en.wikipedia.org/wiki/Payment\\_processor](https://en.wikipedia.org/wiki/Payment_processor)
- 11) [https://en.wikipedia.org/wiki/Special\\_drawing\\_rights](https://en.wikipedia.org/wiki/Special_drawing_rights)
- 12) "IMF Determines New Currency Weights for SDR Valuation Basket". IMF. November 15, 2010. Retrieved 2015-12-05.
- 13) "The dollar alternatives – Ven (4) – FORTUNE". CNN. 21 July 2010. Retrieved 18 November 2010.
- 14) [https://en.wikipedia.org/wiki/Unit\\_of\\_account](https://en.wikipedia.org/wiki/Unit_of_account)
- 15) [https://en.wikipedia.org/wiki/European\\_Currency\\_Unit](https://en.wikipedia.org/wiki/European_Currency_Unit)
- 16) Ungerer, Horst (1997). *A Concise History of European Monetary Integration: From EPU to EMU*. Westport, Conn: Quorum Books. p. 286. ISBN 089930981X. Retrieved 19 January 2016.
- 17) [http://www.independent.org/pdf/tir/tir\\_20\\_04\\_05\\_harwick.pdf](http://www.independent.org/pdf/tir/tir_20_04_05_harwick.pdf)
- 18) <https://cameronharwick.com/blog/money-and-its-institutional-substitutes/>
- 19) Howard, David H. "The Denationalization of Money: A Review" (PDF). *Journal of Monetary Economics*. Retrieved 31 January 2013.
- 20) Friedman and Schwartz, Milton and Anna J. (1987). *Has Government Any Role in Money?*. University of Chicago Press. p. 312. ISBN 0-226-74228-8.
- 21) Boettke, Peter J. (2000). *The legacy of Friedrich von Hayek, Volume 1*. Edward Elgar Publishing. pp. 363, 374. ISBN 1858982995.
- 22) <https://www.nakedcapitalism.com/2016/04/towards-a-theory-of-shadow-money.html>
- 23) <https://www.nakedcapitalism.com/2013/11/shadow-banking-and-the-global-financial-ecosystem.html>