

# **The Crypto Financial Operating System with Asset Backed Coin**

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## **Abstract**

The Crypto Financial Operating System (CFOS) is designed and implemented by Asset Backed Coin(ABC) community to allow anyone in the world to have the freedom of trading in addition to three other well-known human rights, the CFOS is a decentralized financial operating system which can host many kinds of user defined crypto currencies and assets, the system is derived and extended based on Satoshi Nakamoto's Bitcoin, anyone can run his own market by making transactions with others, the CFOS consists of two categories of coins: System Coins and User Coins, System Coins are three types of coins: GEN, TEND and ABC. User Coins are thousands of types of user defined coins or assets, which are supported by those three system coins, these user coins/assets can operate on top the only one block chain of GEN coin in the CFOS, the GEN coin provides free Transaction Confirmation Mining Service to all of other coins or assets, the market value of CFOS itself is presented by one of its system coin called Asset Backed Coin (ABC). The CFOS will enable the freedom of the trading of thousands types of user defined crypto currencies, assets, and financial products in the near future, help anyone eventually achieve his freedom of trading.

## **Introduction**

Since the creation of Bitcoin (Nakamoto 2008), the concept of altcoin become popular, the fundamental need of altcoins are the forth human right: the freedom of trading, which consists of the freedom of transactions and the freedom of exchange assets. In Jan 2014, we have realized that the financial functionalities of Bitcoin can be divided into three different types and handled by three types of system coins, thus our new system CFOS can further power many user defined virtual coins and assets, we evaluated the POW and POS mining cost on single coin system, like Bitcoin, DogeCoin, and PeerCoin, we don't like the money printing of some newly created altcoins, they betrayed the original merit of bitcoin which is "Against government to abuse the printing of money", but the single Crypto Currency System like bitcoin is not business and financial friendly because its mining procedure is not perfect, I never can understand why the people who know how to mint bitcoin first could mine bitcoins very easily, and mining becomes harder and harder for the followers, and the amount of coins get cut half, we doubt if the purpose of such design is to lead the bitcoin price to go higher and higher, by introducing multi-coins into the system and reduce the mining cost to zero, we could create a lots of green Asset Backed Coins, we use one type system coin GEN Coin to provide free transaction confirmation service for all other types of coins, so that all user

coins can be freed from costly and complicated mining business, coin issuers can now focus on how to run his own business safely and securely on top of his own coins and market, furthermore, the benefit of host thousands of types of crypto assets could allow us to create some cash coins like TEND which will have the value of TEN USD, the value will be supported by the ABC community.

## **Why a Financial Operating System?**

The financial operating system we are creating is to use decentralized distributed crypto currency technology to help everyone achieve his freedom of trading.

The current altcoins are maintained expensively and the values of those altcoins are uncontrollable and unpredictable, it is hard for business to predict the cost of transaction fees, altcoins are wasting a lots of CPU power, there are a lots of duplicate work of those altcoins, they are actually now printing a lot of money, some of them are much worse than governments, we are trying to create a rational system to be business friendly and environmental friendly, individuals can have the freedom to operate his own crypto financial market easily and cheaply. We also want to free people from mining coins, we want to allow business to spend more time on their business rather than maintaining his crypto currency to up and running.

We created the new decentralized operating system based on Bitcoin technology to mainly help people to achieve the fourth freedom: the freedom of trading, the new system will allow anyone in the world to define his own currency and operate his market based on his own currency for free, anyone will have the freedom of trading eventually, I believe the freedom of trading is The Invisible Hands

## **System Coins**

The concept of CFOS is to provide a efficient way to allow many types of user coins to leverage one block chain and one free decentralized TX confirmation service provided by its system coin GEN Coin, the CFOS has three types of system coins, the symbols are: GEN, TEND and ABC.

**GEN** shoulders the burden of security and mining in POS such that all other types of user coins can be released from dealing with the mining business. GEN Coins will be mined by volunteers to provide free TX confirmation services for CFOS, at the same time GEN Coins will be also mined by User Coin owners automatically. Most of GEN Coins are pre-mined and it will hardly have any value.

**TEND** is the cash coin for the CFOS, all TX fee will be paid by TEND Coin, for each TX of User Coin, including GEN Coin, sender needs to pay 0.0001 TEND Coin (0.1 CENT), and the ABC community should maintain the value of TEND to be around Ten Dollar level:

Thus the cost of the transaction of user coins is predictable in USD, and it is a constant, then we created one of financial friendly features of the CFOS.

**ABC** stands for Asset Backed Coin, it presents the market value of the CFOS, it is 100% pre-mined and operates just like any other type of user coin, the only difference is ABC is the system coin of CFOS, and the ABC community will use it as funding resource to expand CFOS social network to acquire or merge with other cryptocurrencies. Although ABC, GEN and TEND are all system coins, the difference between ABC coin and GEN coin is ABC Coin has value, the difference between ABC coin and TEND coin is TEND is linked with fiat currency, its value is not depend on the market, namely the market risk of TEND is zero, and it is used to pay TX fee, while the value of ABC coin is decided by market, so it has market risk.

### **Assets/Coins Issuing**

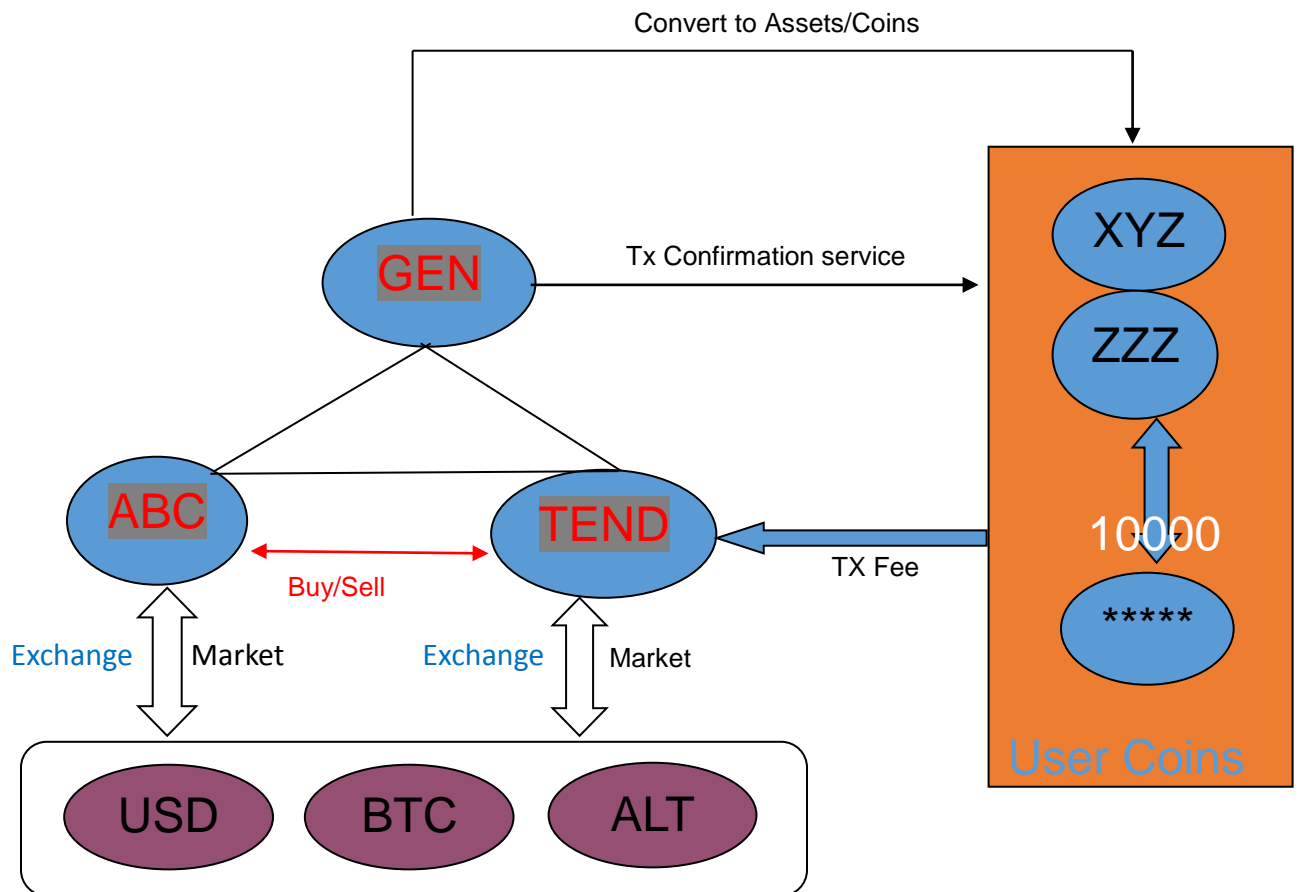
Anyone in the world can submit the request to issue virtual asset or coins for free, once the assets/coins are issued, CFOS will maintain it for free, so there is no cost to issue and maintain user defined coins, the committee of ABC community is responsible for reviewing the virtual assets or coins requests, once ABC committee approved the request, the issuer could begin to send his coins in his market.

The GEN coin can also be converted into user coins, once the issue request is approved by ABC community committee, you will be entitled with a one transaction with the amount you requested, which is usually from 1 million to 10 million coins.

## Crypto Financial Operating System Diagram

Our development is based on Bitcoin Open Source, we added the concept of Asset and Asset Type into the system, we use proprietary technology to categorize the Transactions into multiple asset/coin types, all of types of coins coexist in the single block chain, therefore, it relatively easy to allow us to finish coin to coin trading. Our system coin GEN coin provides the fundamental transaction confirmation service to all of other coins, and we pre-mined about 90% GEN coin in order to make sure the mining cost is extremely low and almost no value to hold GEN Coins, therefore, we can make the whole system run at very low cost, the values of other coins are not decided by how difficult of the mining process:

## CFOS Architecture



GEN coin means Generated Coin(Mining) + Generic Coin(Convertible); ABC coin is CFOS asset backed coin, developers will be paid by ABC, ); ABC has 1B coins; TEND Coin means \$10 (10B coins), GEN has 910B coins, which can be converted to user Assets/Coins).

## **Maintaining the Market Price of TEND**

TEND means ten dollar in our ecosystem, the ABC community are responsible for maintaining the value of TEND at \$10 level via trading in the exchanges, because the DACs of ABC will have to buy TEND to pay the transactions of their user coins, so people who own the TEND coins could sell to the DACs in the exchange at \$10 dollar each, if the market value of TEND go up a lot above \$10, the ABC community will have the responsibility to sell more TEND coin to the market to stabilize the value to \$10 level, if the market value of TEND go down from \$10, ABC community will have to buy TEND to \$10 level by selling ABC in the market.

The issuing of system coins TEND and ABC is based on the of the demand of the transactions and investment, therefore, except GEN coins, the other two system coins have some kind of future cash flow to be backed, therefore the ecosystem is called Asset Backed Coin.

The value of TEND and its amount will be adjusted daily by the community committee.

### **Transaction Fee:**

Every transaction of the user coins and system coins will cost 0.0001 TEND coins as transaction fee, user must have enough TEND coins in his wallet to make transactions, the transaction fee is enforce to protect the CFOS from abusing of making transactions.

## **The Hybrid of POW and POS**

Proof-of-Stack means a form of proof of ownership of the currency, Coin age consumed by a transaction can be considered a form of proof-of-stake, in the Phase-I, we will use Managed Proof-of-Work to provide for other user defined coins on volunteer bases. Here “Managed” means we need to select the certified GEN Coin miners to provide the TX confirmation service for user coins at reasonable confirmation speed, since the GEN Coin almost have no value, so people can just ignore it completely.

In Phase II, after we have enough merchants on board and use our CFOS, we will switch to 100% POS to keep providing the free TX confirmation service for all user coins, and also provide the security for the CFOS like other POS decentralized crypto currency system.

## **P2P Trading Based on Crypto Financial Operating System (CFOS)**

Crypto XYZ coin to crypto TEND coin P2P trading requires an escrow service, in current banking world, due to the nature of the banking system, this escrow cannot be automated. Funds will have to be held by an intermediary individual or business acting as an escrow service, like clearing house.

“The key innovation with our system is, because it’s fully decentralized, and multiple types of coins are hosting on ONE block chain, we could achieve decentralized P2P trading our automated mediator Btcft.com.” (Btcft.com is far from fully implemented.) The below is how possibility might work...

Bob is looking to sell his XYZ for TEND and enters a sell order (ask) via the BTCFT which is a marketplace for people to post buy sell information, like localbitcoin.com. Alice is looking to buy XYZ for her TEND and enters a buy order (bid) via the BTCFT.com marketplace..

The below is the detail steps by using 2-of-3 MultiSig to achieve P2P trading efficiently

BTCFT.com acts like a mediator and release the fund automatically based on predefined graceful time between Bob and Alice:

- 1). Alice creates a multisig address One, requiring 2 signatures out of the Alice, Bob and Btcft.com.
- 2). Alice sends funds (TEND) to this address One.
- 3). Bob creates a multisig address Two, requiring 2 signatures out of the Alice, Bob and Btcft.com.
- 4). Bob sends funds (XYZ) to Two.
- 5). Within predefined 10 minutes graceful time, after both Bob and Alice verified these two transactions in block chain, both should sign the transaction for other, then transfer the received fund to a new address, for example if Bob signs the transaction of address One, then Bob will need to transfer the fund to a new address within his wallet, then sign the transaction of address Two for Alice, vice versa.
- 6). If Bob has not signed the transaction of address Two for Alice within 10 minutes after he transfers the fund, Btcft.com will sign the transaction of address Two for Alice because we know Bob already withdrew the TEND fund.
- 7). If Alice has not signed the transaction of address One for Bob within 10 minutes after she transfers fund, Btcft.com will sign the transaction of One to Bob because we know Alice already withdrew the XYZ fund.
- 8 ). If no one acts within 10 minutes, Btcft.com sign the transactions for both, so the trade is done.

Drawback: Both Bob and Alice have to transfer fund to a new address to indicate the fund has been received.

Btcft.com will leave regulatory compliance as a decision for the users of the network and they do not expect to deal with any financial regulation themselves as the business is not an exchange, because at any given time Btcft.com could not get the fund, “In the same way that Satoshi has provided Bitcoin we’re providing the decentralized exchange mechanism.”

## **Compare with other Coins**

### **1. Bitcoin:**

Bitcoin is a single coin system, and the role of the transaction fee, mining, and the value of the ecosystem are all combined into one type of coin, which is not right for the scalability of the system, the mining difficulty along the time is self-created trouble for its community and the purpose of doing it is doubtful, it is not environmental friendly, it is not business or financial friendly enough.

### **2. Altcoin:**

Already addressed in above.

### **3. Colored Coins:**

Colored coins are a means marking coins in the Bitcoin block chain and turning them into cryptographic assets. This system is inherently based upon trust in the issuer, there is no value proposition that would cause their adoption to be viral nor increase the liquidity in the market, it is still expensive to manage and the system is very hard to be extended due to manipulation of the number of digits of a bitcoin.

More to come....