PWX Questionnaire

Stablecoin - X8 Currency

Questionnaire

Note: you can decline to answer certain questions (like marketing / go to market) which may be trade secrets and we will put in "declined to answer due to current trade secret".

a. General

    i. Which blockchain / DLT are you building on top of?

Our project has a dual token model, which includes a Utility token (X8X) and a stable token X8Currency (X8C). Both of the tokens are launched on the Ethereum network. X8X is of ERC-20 standard and X8C of ERC-223.

    ii. How does the stablecoin work?

Our project has a dual token model, which includes a Utility token (X8X) and a stable token X8Currency (X8C). X8X has a fixed and limited supply of 100.000.000 tokens. The amount of X8X utility tokens held by a user dictates how much X8C currency tokens a user can obtain from the issuer X8 AG. The ratio for calculating the X8X utility token requirement for a certain allotment size of X8C currency tokens is $X8X = \sqrt{X8C}$, or $X8X2 = X8C$.

X8currency consists of the top 8 global currencies plus physical gold reserve. When an investor wants to buy this product, he can buy it with fiat currencies or with cryptocurrencies. When our system receives an incoming transaction, it uses its own technology to automatically diversify the amount of the payment into proportions of EUR, USD, JPY, GBP, CAD, AUD, CHF, NZD and gold – the X8currency basket. This money

becomes a part of the reserves. The system also diversifies the reserves across up to 8 different brokers and banks using Financial Information Exchange Protocol. In this way, the risk in minimized as it is spread over 8 different financial institutions.

This diversified basket of currencies and a diversified network of banks and brokers prevent a scenario of significant loss and protect an investor from individual currency price fluctuations or individual bank/broker failure. Bank reserve deposits are further reinsured to create the safest possible cryptocurrency package. Bank reserve deposits will be reinsured with the Swiss Re, the leading global reinsurer. Ratios of currencies in the diversified basket are optimized with the Automatic Reserve Management AI technology, so that the basket remains stable and is able to fight off the effect of inflation.

iii. What is your revenue model?

Funds gathered in the Token Generating Event (TGE) are predicted to ensure a 3-year runway for all of the elements. The largest portion is allocated for the costs of the Swiss architecture and IT hardware and production overhead, followed by research and development, marketing and legal. Additionally 600.000 X8X tokens (6% of the total supply) were allocated to X8 AG to ensure additional funding in the later period.

b. Launch & marketing
i. What does the market need to be confident in the stability of your token?

As mentioned in part a (ii.), ratios of currencies in the diversified basket are optimized with the Automatic Reserve Management AI technology (ARM AI). The technology was developed by our CEO Gregor Koželj and has been operational in a live environment since December, 2015. Its track record of 32 months is presented below.

ii. How are you bootstrapping to that level of confidence?

Confidence in the token model and its business strategy will be additionally ensured through two security elements. First is the reinsurance of the funds backing the diversified basket of the X8C token, which will be reinsured with the Swiss Re, the leading global reinsurer. Second is transparency, which will be ensured through regular audits of the fund backing the X8C fiat basket,

iii. What are your go-to-market strategies?
1. Systematic portfolio risk management (investment risk control turned into cash flow generating activity
2. Onion marketing approach with crypto audience in the middle of the onion, institutional participants in the outer layer of the onion. The layer between these two layers remains indirectly targeted through directly addressing these two main groups through institutional expert events, crypto conferences, traditional financial media, crypto media.

c. Economics
i. What is your coin stable with respect to?

As described in part a (ii.) X8C consists of a diversified basket of 8 fiat currencies and gold (EUR, USD, JPY, GBP, CAD, AUD, CHF, NZD and gold – the X8currency basket). Additionally ratios of currencies in the diversified basket are optimized with the Automatic Reserve Management AI technology, so that the basket remains stable and is able to fight off the effect of inflation. Thus, the X8C tokens does not represent a fixed peg, dependent only on one backing asset. The stability is measured against the entire basket of currencies.

ii. How much volatility can this peg withstand? Is that the same for upwards and downwards pressure? How wide is the band of behavior it can support?

The system can withstand complete collapse of any of the individual currencies or a combination of more of them at the same time. Systemically the diversification arrangement together with the ARM AI is able to keep the X8currency stable during the simultaneous collapse of up to 4 world's top currencies.

iii. How easy is it to analyze the band of behavior from which it can recover?

Portfolio risk profile is determined systematically based on scientific risk principles, which means that the overall basket will always react the same way in the same scenario and will have very similar outcomes in different kinds of scenarios with the same volatility. Volatility of the basket is directly proportional to the volatility of the individual currencies and can be determined in advance for different scenarios based on weighted average basket calculations.

iv.   **How expensive is it to maintain the peg/stability mechanism?**

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v.   **How transparently can traders observe the true market conditions?**
1.   Each day an independent daily audit check is performe by an independent institution JP Fund Services S/A to confirm the level of assets backing the X8C payment token
2.   The system is present in the primary market with full fair mark-to-market value bid/ask quotes for investors to buy or sell X8C for exactly the amount of the real reserves value. Traders will be able to verify this fair value calculation with the daily audit data pushed to blockchain.

vi.   **Which monetary theory (theoretical) assumptions do you think are not true and how does your protocol account for that? Does your stablecoin supply scale in response to demand? If so, how?**
1.   Assumption that a currency instrument like EUR or USD cannot fall to 0. Our system predicts the collapse of any of the 8 currencies in the basket and diversifies risks so that in such an event only the portion allocated into the collapsed currency is lost.
2.   Assumption that currencies fall to 0 in a straight line. In reality such scenarios always show that prices of currencies brake out of the straight downward trend and show some level of 2-way market activity (from buy and the sell side). These intermediary price travel provides an opportunity for micro reallocations of the reserves to maintain the optimum for stability and value preservation on the long term.

vii.   **Does your stablecoin supply scale in response to demand? If so, how?**

The supply of X8C tokens is dependent on the amount of funds that enter its ecosystem. Thus, a new X8C token (or part of it) is minted only when new funds enter its ecosystem.

Example: the value of X8C is 1 USD. In this case, 1 new X8C tokens will be created only when 1 USD of funds (or the equivalent amount in any other of the 8 backing fiat currencies) enter the X8C ecosystem (is exchanged for X8C).

When funds exit the X8C ecosystem (X8C is exchanged for fiat), then the corresponding amount of X8C tokens are burned. Thus, a 100% backing is ensured at every time.

viii.   **Who provides the capital to maintain exchange rate peg? How are they compensated / Why do you think they would continue to lock up capital, given other investment opps?**
1.   The rate is kept through fair value of the reserves in the basket, which can at any time be exchanges into any other currency (because of the 100% convertibility of every element in the basket) There is no third party that would artificially create orders or influence exchange rate of the stable coin.
2.   2. The process is run by ARM AI
3.   There are no fees in the system as business model is completel tokenized. The appreciation for this service is expressed purely in the bidding for the X8X utility token, which provides access to the X8currendy system and its use without fees. Successful business development for the entire ecosystem is translated through positive market development for the utility token.

ix. **An eventuality plan in case of a "black swan" event.[1,2] The 1% case will happen eventually.**

Risk diversification is already taking a "black scenario" into account and predicting that it can happen any second without delay. Risk profile of the basket is managed on the elemental and the aggregate level in real time in Straight Through Processing manner.

d. Tech

i. **Are any novel consensus mechanisms used, over and above the underlying blockchain?**

No

ii. **What transaction throughput can the blockchain currently handle and how does it plan to scale? Do its plans coincide with your plans for your estimated demand?**

It is the throughput capability of Ethereum network. X8currency system includes optimizations where in certain scenarios it does not need to utilize the blockchain network, increasing the throughput. Also, when the X8C product is traded on the X8currency platform portal and stays within it, the transaction throughput remains unaffected by Ethereum blockchain network limitations. In this respect the average combined transaction throughput can range between 10 transactions per second to several hundred per second at the current state of the X8currency system and the Ethereum network

iii. **What tradeoffs does your protocol make and why did you make those tradeoffs? (supply/demand, temporarily peg breaking) (censorship resistance) (privacy tradeoffs) (accuracy of present market data and ease of manipulation of the data feed protocol uses (responsiveness of market and ease of manipulation)**

The only tradeoff in the system is the tradeoff between the risk and the reward. Clients need to accept a certain level of risk to be able to preserve value in the inflationary environment. This level of risk leads also to real participation in the payout that enables the fight against inflation. ARM AI provides one of the best risk/reward ratios, so users are able to obtain a sustainable trajectory during the entire range of potential uncertainty. Peg to the basket is never broken. The tradeoff gives to the user the improved status against fixed 1:1 single currency pegs as any fluctuation is transformed into proportional upside rebound according to the risk/reward metrics of the X8 system.

iv. **Are there any centralized components of your system? Would any of these be easy for govs to shut down?**

ARM AI is running centrally from a server cluster in a secure TIER4 DC location, to which (cluster) the link is not available to the public domain.

v. **Does your protocol require information outside the blockchain such as a feed of price data? If so, how does this oracle work? Who manages it, what are the incentives for managing it, and what happens if the data they provide has a glitch?**
   1. The system accepts real time STP quotes from the interbank execution providers. AI evaluates every change of the price of ever currency and keeps calculations of all relative volatilities and relative volatility differentials as well as the relative volatility differentials of the spreads. At each change of the respective values the AI updates the allocation of the basket for best future value preservation position.
   2. X8 AG manages the ARM AI.
   3. ARM AI is an autonomous and independent system without human interference requirements.
   4. All the economic effects are translated through free market pricing of the X8X utility token, which enable the access to the system. Management and the team holds a stake in the X8X utility tokens. (information in the project's WP)

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vi. **Which participants can see which transactions? What is the data and metadata available, and to whom? How does this impact privacy?**

Free availability of records through Etherescan.

vii. **Are you doing anything with formal verification? Smart contracts used?**

Every time a trade is made, the SC will respond automatically with a confirmation to the user

viii. **What is the rebase period? (Length of time between currency adjustments.)**

STP (milliseconds)

ix. **Can we make this automated?**

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x. **Do we use a smart contract, or network rules of the blockchain operators?**

SC is an auto exchange platform mechanism, which allows the user to send for example ETH to the smart contract address to allow programmatical conversion into and out from X8C without the need to use the web platform portal of the X8currency.

e. Regulation
i. **What are your perceptions of local and global regulation in supporting stable coin, asset backed token economies?**

We believe that regulators will have a more positive approach on stable digital currencies than on crypto currencies. This is also linked to the fact that stable coins are not speculative and can be, as in the case of X8currency, a way to preserve value for the investors. As the name suggests, a stable coin is a digital token that has low price volatility because it is pegged to an underlying fiat currency or even better as for X8currency, to a basket of 8 fiat currencies and gold. Thus, it would work well for practical applications involving payments on a blockchain network as a store of value, a medium of exchange and unit of accounting for routine and everyday transactions of both large and small values. As applications that make use of blockchain and stable coins become more mainstream, they can help provide merchants, consumers and global suppliers with cheaper, better, faster and more secure alternatives to cash, credit cards, debit cards and wire transfers.

ii. **What could be done to improve regulation in terms of speed, quality, value for your company?**

We think that a more harmonized and coordinated legislative approach at international level will help the massive adoption of digital stable currencies. At the moment the growing contradicting legislations at national level and the frequent switch of positions on cryptocurrencies, is a factor of uncertainty which not only does not allow the mainstream use of digital currencies but also doesn't stimulate the flow of institutional capital into cryptocurrency markets. The objective is to put in place harmonized legislations that would further strengthen corporate governance in cryptocurrency companies. The trick for regulators is to balance investor protection and systemic stability with the need to protect innovation and encourage capital formation in different legal systems.

At present the regulatory environment is chaotic because there's rapid divergence in the regulation of cryptocurrencies across jurisdictions. The recent bans of trading in cryptocurrencies in China, India and more recently in Saudi Arabia, will only see the increase of money laundering and financial crime related activities.

On the other hand, the establishment of a good legislative framework with strict KYC and AML rules like in Switzerland where X8currency decided to set up its project, creates a stimulating environment which attract investments, intellectual capital while at the same time protecting investors from frauds and scams.

The recent creation in Switzerland of a new license for FinTech companies, is highly welcomed as it will allow companies with a highly FinTech component, like X8currency, to grow in a regulated yet flexible environment.

f. Testing
   i. **What kind of simulations have you done and what have they helped you learn? (simulating broad array of market conditions)**
      1. Mental models for simulations