

# //// Pier & ///Etch Responses

StableCoins //// Pier & ///Etch

## Questionnaire

Most information + drawings can be found here: <https://github.com/pierprotocol/pier-smartcontracts>

////Etch & ////Pier

a. General

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

Currently Ethereum but we are looking at Polkadot Parachains to solve scalability issues.

ii. **How does the stablecoin work?**

Participating blockchain companies who want to use ///Etch to pay out wages in real-time will stake their own native token within a basket of other ERC20 tokens in a smart contract that has the ability to “top up” with more tokens from feeder wallet to keep the stability. The price will be pegged to the UN FAO Food Price Index, or the Consumer Price Index.

iii. **What is the purpose of your coin? What does it aim to achieve and which problems does it solve?**

We needed a way at ///Etch of paying people wages and bonuses within the blockchain community in crypto without exposing them to volatility risk of paying out in Ether or Bitcoin.

- iv. **When we say something is stable what do you think it means? And when it comes to monetary policy specifically?**

The question is stable to what? Workers on the ///Etch platform only care about the cost of living i.e putting food on the table more than the having a token that is pegged to \$1.

- v. **What is your revenue model?**

When the basket of tokens go up, new ///Pier tokens are created and distributed to participating token staking companies. We will keep a % for operation costs and profit to be shared between the ///Pier reward token holders.

b. Launch & marketing

- i. **What does the market need to be confident in the stability of your token?**

The market will see a transparent smart contract with the amount of ERC-20 staked compared to ///Pier tokens issued. Also the algorithm to “top up” with more tokens will give confidence that in the long run stability can be maintained.

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

We are deploying the contract on a test network initially to test the assumption and keep the fees to zero.

- iii. **What are your go-to-market strategies?**

Our workers on the ///Etch platform.

c. Economics

- i. **What is your coin stable with respect to?**

The UN FAO Food Price Index, or the Consumer Price Index

- 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?**

We have picked the most volatile asset to back the token - ERC20 ICO tokens. With this in mind, having the ability to “top up” in a downward event, or issue more in an upward event will make us to ride the most volatile of conditions.

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

Very easy with api feeds from exchanges.

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

The basket of tokens would adjust frequently initially to show the algorithm working. In time and with confident from the market this could be done less frequently.

- v. **How transparently can traders observe the true market conditions?**

100% transparency.

- vi. **Which monetary theory (theoretical) assumptions do you think are not true and how does your protocol account for that?**

That a token pegged to a \$ 1:1 is stable. What if the buying power of the dollar decreases? This is why we are focused on the price of living because that is what the workers so - go to work to put food on table.

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

It will scale automatically as per the code.

- 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?**

No locked up capital needed. We are asking participating companies to stake tokens that would normally just sit in a cold wallet.

- ix. **An eventuality plan in case of a “black swan” event.<sup>1,2</sup> The 1% case will happen eventually.**

The ///Pier token protocol is very much linked to the health of the Ethereum system. If there is any liveness issue with the Ethereum network, say if blocks cannot be mined or a 51% attack by a bad actor the integrity of the ///Pier could be in jeopardy.

Also a possible sharp crash in the market or some other failure in the oracle system could have huge implications. This is why we intend to have a big red button within the contract that is governed by the ///Pier community.

A ratchet system is proposed to sell any underperforming token when distress level is reached.

d. Tech

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

Only that this must be true decentralised.

- 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?**

This is why we are looking at parachains.

- 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)**

We are relying on Oracles. These need to be decentralised.

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

This is to be fully decentralised. The community will have the ability to stop the contract, therefore brake the equilibrium.

- 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?**

Yes feeds from exchanges/oracles. Community can shut down temporarily. We are testing to see if there is another way.

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

Fully transparent. End user wallets will be private.(data hashed)

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

Smart contracts yes. See GitHub for more details.

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

Every few minutes. The exact time not formalised yet. Still testing.

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

Yes

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

Yes

e. Regulation

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

Have only had conversations in the UK. Very positive.

**ii. What could be done to improve regulation in terms of speed, quality, value for your company ? f. Testing i. What kind of simulations have you done and what have they helped you learn? (simulating broad array of market conditions)**

Running on the test network.

**1. Mental models for simulations**

Not yet

**2. Econometric models**

Still not convinced there is such a thing as a “stable token” as it is always the market that decides and that is all about confident.

**3. Agent-based Modelling / Computer simulations**

Not yet

**4. Other (Please describe)**

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