# Element Zero 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?

Ethereum.

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

Element Zero does not use a currency peg or collateral or any supply or demand method to ensure stability. Element Zero's stability protocol it is based on a smart contract algorithm that is designed to eliminate any possibility for volatility in the first place by preventing the user from selling the stablecoin above or below the current (fixed) face value.

The entirely new stability methodology, the Element Zero Stability Protocol, is designed to process a two way transaction. On one side the sender can send a stablecoin to a receiver but on the other side the receiver must send back in return cryptocurrency, an invoice or receipt with same value as the stablecoin. In the event that the value of the exchange does not match, the smart contract steps in to balance the face value between the sender and the receiver by returning the extra value to whom it belongs. The two-way nature of the smart contract means that the Element Zero stablecoin cannot be traded speculatively, since it's value is enforced.

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

We are not here to replace money, we are here to replace how people use and transfer money and protect their value.

In the future there will be no paper money, credit card or old technology such as PayPal or Western Union. In order to make a better way of payment we needed to make sure that our stablecoin is not only can stay stable 100 years from now, but also can overcome inflation to keep the purchasing power in place.

Our system has been designed to be an open source solution that allows businesses, organizations and even governments to create their own stablecoin for free with their own industry-relevant features and with many more options that enhance the user experience while protecting their data, in contrast to today's poorly retrofitted credit cards.

Problem	Solution
Payment solutions using cryptocurrency require a stablecoin, and until now, there has been no truly stable coin	The EZ stablecoin solution adjusts to acknowledge normal inflation rates in order that the value is not diminished year after year.

Current wallets do not support market needs such as co-brands for vendors, community development other customer loyalty features.	Element Zero intends to transform the way we think about payments by providing a smart, feature-rich, open-source payment solution. Government-issued digital currencies are less concerned with the customer experience, currency is more of a utility. Element Zero allows brands and other organizations to offer a solution that is tailor-made
Current e-commerce checkout processes require sign-up and/or the sharing of personal information which is labor intensive and exposes users to security breaches and identity theft	for their community.  Element Zero's CartBox is a new way of payment that allows for a 'drag-and-drop' purchase of goods and services without the need to disclose personal information

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

Stability means ZERO volatility and ZERO lost of purchasing power.

iv. What is your revenue model?

Element Zero is not-for-profit organization. All of the services are decentralized and free. That being said, partners who wish to launch their own branded stablecoin based on Element Zero can set any transaction fees; while 75% goes to the stablecoin partner and 25% goes to the system.

## b. Launch & marketing

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

Our stablecoin has zero volatility in the first place, therefore it does not need to be stabilized. We invite the community to test the stablecoin stability protocol using the Testnet and soon we'll release our stablecoin Beta version allow users to actually trade it and see that there is no room for volatility or manipulation.

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

We don't need bootstrapping our stablecoin like all others. Confidence take place immediately from the first transaction since there is no possibility for volatility. Also during the Beta version there will be 100% 1:1 liquidity via Element Zero SmartSwap, which means secondary market exchange is not needed.

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

We have strong and very unique go-to-market strategies but we are not going to answer due to current trade secrets.

#### c. Economics

i. What is your coin stable with respect to?

All Element Zero stablecoin has the same face value of \$100. Element Zero's protocol is designed to increase the value of its stablecoins in a way that will balance its purchasing power by overcoming inflation. This is achieved through automatically following the Personal Consumption Expenditures (PCE) and the Consumer Price Index (CPI) average inflation per year over the last 100 years—whichever is higher. This design is what will combat the extreme scenarios of temporary hyper-inflation crises.

To ensure that Element Zero stablecoins are not losing value due to USD volatility, the system will measure the SDR (Special Drawing Rights) index, which is determined by summing the values in U.S. dollars, based on market exchange rates of a basket of major currencies, including the U.S. dollar, Euro, Japanese Yen, Pound Sterling and the Chinese Renminbi. The SDR currency value is calculated daily by the International Monetary Fund and the valuation basket is reviewed and adjusted every five years.

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?

Element Zero stability protocol is unaffected by market volatility and there is no room for manipulation by supply or demand.

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

There is no recovering because there is zero volatility. The ONLY parameter that can change the Element Zero stablecoins face value, is inflation in order to keep the purchasing power in place.

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

The stability protocol is fully decentralized and can stay stable on any market condition or crises today and even 100 years from now.

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

100% transparency in real time.

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

Problems with Stablecoins pegged against currency

There are significant issues for stablecoin companies that have created digital coins where their stability comes from being pegged against fiat currencies, such as the US dollar, Euro, Yuan, etc. We believe that in the future, governments will step forward with their own digital coin, instead of letting the market be controlled by private companies. Therefore, once this happens in the US, all stablecoins remaining in the market that peg against fiat USD will likely disappear since there's no logic for the public to keep buying coins pegged against the USD from a private company when it can be bought directly from 'Uncle Sam'.

Problems with algorithmic stablecoins

We believe that no matter how other algorithmic stablecoins design and implement their protocols to manage stability, they cannot anticipate all possible market conditions. The future is unpredictable and as it is often said, "we don't know, what we don't know." The logical conclusion is that if there is a potential for price volatility, there will always be risk that the stability models will not cover all market fluctuations and fail, causing the coin's price to collapse.

Element Zero is designed to overcome this very weakness by eliminate any possibility for volatility in the first pace.

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

With no cap on inventory, Element Zero stablecoins - can support any market demand and users can purchased stablecoins at any time, directly from the smart contract at the current fixed face value of \$100 before any adjustments for inflation.

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 opportunities?

Element Zero does not require capital to maintain a peg. Also Element Zero creates the world's first exchange without an exchange based on Atomic Swap Matcher between peer-to-community.

ix. An eventuality plan in case of a "black swan" event. The 1% case will happen eventually.

Element Zero stability protocol is not affected by any black swan event. The entire cryptocurrency can boom or crash and it will not change the the coin face value. Even in event of global hyperinflation when the Personal Consumption Expenditures (PCE) is distress, the protocol will switch and follow the Consumer Price Index (CPI) - average inflation per year over the last 100 years.

# d. Tech

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

Element Zero is implemented on top of Ethereum.

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?

Since Element Zero's growth strategy is targeted at replacing the needs of credit card and systems such as PayPal and Western Union, the transaction throughput must be very high. In the future once the adoption will increased we'll examine other blockchain solutions and may even move to our own independent chain.

ii. 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)

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<sup>&</sup>lt;sup>1</sup> https://en.wikipedia.org/wiki/Black swan theory

To achieve 100% stability and eliminate any option for manipulation we had to remove the ability of free trading, which mean users no longer have the ability to trade Element Zero stablecoins above or below their face value.

We are sure that there will be critics who claim that this new method runs against the idea of a free market. However, any decentralized system must be designed as autonomous and not dependent on a committee of individuals to brainstorm and change policy, if and when extreme conditions transpire. Therefore, those stablecoins that are pegged against fiat money (such as U.S. dollars, euros, pounds, yen, etc.) that use a committee to monitor their coins also do not support free market principles. The truth is there is no such thing as a free market. So, the only question is whether a decentralized system or a centralized system controlled by a small group of people who make decisions for all. Since Element Zero's stablecoin is designed to overcome inflation and stabilize its purchasing power, the value of our stablecoins will follow and change based on public economic behavior, a datum which we believe itself expresses the true spirit of a free market.

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

The system is designed to be 100% decentralized. Even if there will be no secondary market exchanges to support our stablecoin, Element Zero Smart Swap can act completely independently as a Peer-to-Community decentralized solution.

iv. 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?

We uses API's (Application Program Interface) to measure market prices, by buying and selling every day a fraction of BTC (Bitcoin) and ETH (Ethereum) from leading exchanges.

We also measure the inflation by following the Personal Consumption Expenditures (PCE) index and the Consumer Price Index (CPI) index. If Governments will conceal that information, the system will rely on the Consumer Price Index (CPI) average inflation per year over the last 100 years. In the future we believe that Element Zero's wallet will act as one-stop-shop will be able independently—and in a decentralized manner—to measure real time Personal Consumption Expenditures (PCE).

We also measure the SDR (Special Drawing Rights) index, which is determined by summing the values in U.S. dollars, based on market exchange rates of a basket of major currencies, including the U.S. dollar, Euro, Japanese Yen, Pound Sterling and the Chinese Renminbi. The SDR currency value is calculated daily by the International Monetary Fund and the valuation basket is reviewed and adjusted every five years. If Governments will conceal that information, we will be able to measure currency changes by using the first method of API to sell a fraction of BTC (Bitcoin) and ETH (Ethereum) against a currency.

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

All the Element Zero transactions are visible on the blockchain. No private data will be available public.

Our partners, businesses that create their own co-branded stablecoin on top of Element Zero platform, will have the ability (as long that users old their specific stablecoin in their wallet) to send messages to the user, but once the users no longer holding those

stablecoin the creator no longer be assured that they can contact those users. This is another reason to build incentive into the partner's coins. It will enable them to maintain and nurture their customer relationships effectively and very very efficiently.

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

Our stablecoin is algorithmic stablecoin governed by a smart contract. And we have many other smart contracts in the system. All of those smart contracts will be formally verified by third party experts. Formal verification will also be conducted from a security and hacking point of view.

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

Real time! Every time users trying to buy or sell or use an Element Zero stable coin the smart contract measures the face value and makes sure that in each transaction the user will receive the exact 100% match fixed face value.

viii. Can we make this automated?

1. Do we use a smart contract or network rules of the blockchain operators?

Element Zero system is run 100% by smart contracts.

### e. Regulation

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

Regulation is designed to protect the public but often, they can't protect, especially from sophisticated scams. As we see today, regulations and laws are struggling to keep up with the technology. That being said, we believe that in the process of trying to achieve the goal of protection we end up with 'over regulation' and regulations that are not synchronized with each other and not adjusting themselves to today's needs, they become the number one killer for innovation and economic growth. Citizens of many countries pay the price while governments dictate rules; it's something that we see the world struggling with today

If the history told us anything it's that the only constant in the world is change, therefore it's clear that no governments that dictate rules or structure as we know it today can be prepared for constant change.

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

We built our solutions in a way that it's 100% comply with any regulation and taxation, especially the US one. It's took a lot of time and money but we been able to solve that.

## f. Testing

- What kind of simulations have you done and what have they helped you learn? (simulating a broad array of market conditions)
  - 1. Mental models for simulations
  - 2. Econometric models
  - 3. Agent-based Modelling / Computer simulations

# 4. Other (Please describe)

Since out stablecoin are not required to be stabilized due to volatility there is no economic model needed. That been said we created a TestNet environment to run many simulations and users can check that as well as see that our stablecoin is completely element any possibility for volatility in the first place