## Response to 6351-01-P

"Request for Input on Crypto-asset Mechanics and Markets"

February 14, 2019

This response is authored by Avrohom Gluck, CEO and founder of www.paircoin.us, an upcoming philanthropic crypto-currency asset. I would like to offer PairCoin's perspective and answers for your questions in this RFI.

PairCoin, unlike Ethereum, is a Proof of Work platform; nevertheless, it is imperative that all players in the emerging virtual currency marketplace support each other and the CFTC's worthy efforts in clarifying the technology and the nuanced differences which may affect regulation and legislation.

PairCoin will only address the questions not adequately addressed by the agency's two primers and public responses.

While this paper utilizes the Commissioner's numbering in bold, many of the unlisted questions are also answered in our responses below.

- 1. What was the impetus for developing Ether and the Ethereum Network, especially relative to Bitcoin?
- 2. What are the current functionalities and capabilities of Ether and the Ethereum Network as compared to the functionalities and capabilities of Bitcoin?

Ethereum and Ethereum network had two births, each with a somewhat different impetus.

The original Ethereum network was proposed in 2013 by Buterin to provide a blockchain-based store of value which could be used to fuel smart contract scripting, something for which Bitcoin's inherent scripting language is weak. The consideration to modify Bitcoin for this purpose was thwarted when consensus for these changes could not be achieved among the Bitcoin community. Only then was Ethereum proposed by Buterin as a better Bitcoin.

In 2016, after a \$50 million theft of Ether took place, based on software flaws in the smart-contracting scripts, Ethereum was split into two separate blockchains because of conflicting opinions inside the previously united community. A new blockchain with the theft reversed continued under Buterin and his team and is known as Ethereum (ETH). The original continued as Ethereum Classic (ETC) under a new team. Ethereum Classic

suffered from hacks in both 2017 and 2019. This history is significant and worthy of CFTC's attention.

The first conception and birth of Ethereum was rooted in a firm commitment to immutability and decentralization. This was based on the belief that hackers could not possibly pierce the network's armor of decentralization. When this belief was shattered by the failures of 2016, the majority of the original Ethereum community veered from faith-based immutability to allowing control by community consensus. This group (i.e. the Ethereum community) is doubling-down on this path with the current commitment to change to Proof of Stake.

This history leads to the two major differences between Bitcoin and Ethereum.

Bitcoin	Ethereum
Bitcoin serves only as a store of value	Ethereum serves as:
	<ul> <li>A store of value</li> </ul>
	<ul> <li>A service tool, i.e. smart-contracts</li> </ul>
	<ul> <li>A source of funding for performing</li> </ul>
	these services
Bitcoin adheres to the belief of the	The Ethereum community has accepted
inherent immutability of its blockchain's	that the network must be partially
size and hash volume.	centralized and under control of the
	community.

These comments do not indicate any preference to one community's values and cryptocurrency over the other. CFTC must consider what kind of oversight is required for the Ethereum model as described and whether volatility, potential ability to be manipulated and/or splits within the community can cause risk to stakeholders, which are fundamentally different than those associated with Bitcoin.

3. How is the developer community currently utilizing the Ethereum Network? More specifically, what are prominent use cases or examples that demonstrate the functionalities and capabilities of the Ethereum Network?

It is noteworthy that AWS, the market king for cloud computing provides a blockchain template for Ethereum<sup>1</sup>. This indicates that Ethereum has been embraced by the developer community for the long term.

11. There are reports of disagreements within the Ether community over the proposed transition to a proof of stake consensus model. Could this transition

<sup>&</sup>lt;sup>1</sup> https://aws.amazon.com/about-aws/whats-new/2018/04/introducing-aws-blockchain-templates/

from a proof of work to a proof of stake verification process result in a fragmented or diminished Ether market if the disagreements are not resolved? Yes.

13. How is the governance of the Ethereum Network similar to and different from the governance of the Bitcoin network?

See response to #1 and #2 above.

14. In light of Ether's origins as an outgrowth from the Ethereum Classic blockchain, are there potential issues that could make Ether's underlying blockchain vulnerable to future hard forks or splintering?

Yes.

15. Are there protections or impediments that would prevent market participants or other actors from intentionally disrupting the normal function of the Ethereum Network in an attempt to distort or disrupt the Ether market?

Ethereum, as a blockchain which employs centralization of the Ethereum community, can be successfully regulated by governmental oversight, no differently than any public corporation.

16. What impediments or risks exist to the reliable conversion of Ether to legal tender? How do these impediments or risks impact regulatory considerations for Commission registrants with respect to participating in any transactions in Ether, including the ability to obtain or demonstrate possession or control or otherwise hold Ether as collateral or on behalf of customers?

These risks are not substantially different than any foreign exchange market, which is subject to variant pricing of exchange rates. The Ethereum blockchain is transparent and regulators oversight will ensure that possession and control are adequate to hold Ether.

20. Are there any types of trader or intermediary conduct that has occurred in the international Ether derivative markets that raise market risks or challenges and should be monitored closely by trading venues or regulators?

There is an observable relationship between announced "maintenance down-times" of certain crypto exchanges and concurrent dramatic price fluctuations for which allegations of manipulation have been leveled. These must be studied by regulators to determine whether they pose a greater or different risk than commodity and foreign exchange markets.

## 22. Are there any emerging best practices for monitoring the Ethereum Network and public blockchains more broadly?

Yes. Google recently announced<sup>2</sup> a suite of open source development tools which allow anyone to search Bitcoin and Ethereum blockchains and apply artificial intelligence to these results. These will allow big-data financial organizations to create algorithmic trading tools like those used on many financial markets, perhaps a new risk factor. At the same time, regulators can employ these very tools for monitoring blockchains.

## In Summation:

PairCoin believes that Ethereum should be brought to additional public markets. The CFTC should continue its accelerated pace towards understanding and regulating these markets. The statement cited by the Director of the SEC in the request for information is 100% on the mark. While a digital asset offered as a security requires a filing, there comes a time when the asset holders are no longer investors which require protection. Trading of the currency at this stage should be only as regulated as currency traders using a foreign exchange. The SEC and the CFTC will need to define the events or factors which trigger this change in status.

Thank you for this opportunity to provide a public response to your questions.

Avrohom Gluck

CEO, PairCoin LLC Director, PairCoin Foundation, Inc.

 $<sup>^2\</sup> https://www.forbes.com/sites/michaeldelcastillo/2019/02/04/navigating-bitcoin-ethereum-xrp-how-google-is-quietly-making-blockchains-searchable/\#10c4b48e4248$