Comments to the New York Department of Financial Services on the Proposed Virtual Currency Regulatory Framework

Dear Superintendent Lawsky and the Department of Financial Services,

We at Onename (legally incorporated as Halfmoon Labs, Inc.) appreciate the opportunity to comment on DFS-29-14-00015-P, “Regulation of the conduct of virtual currency businesses,” also known as the “BitLicense."

Onename is a technology startup operating out of New York. Our team is currently comprised of two founders and some contractors and we are working on rapidly expand our team by hiring our next few full-time employees here in New York.

We are a business that uses virtual currency ledgers (blockchains) and token amounts of currency to perform non-financial operations for our users (such as registering domain names and usernames that are globally unique across the currency).

Considering the nature of our business and the fact that we believe that the financial use-cases of virtual currencies to have been covered extensively to date, our comments to follow will primarily focus on the non-financial use cases of virtual currencies.

The Distributed Ledger

You may be aware that the distributed ledgers (or “blockchains”) that power most of the popular virtual currencies today are not limited to providing the backbone for financial services - they also enable an entire range of new non-financial services and applications.

In fact, many of our colleagues in the Computer Science research community consider the blockchain technology to be an extremely significant advancement in the area of distributed systems. We’ve seen developers and entrepreneurs build applications that support everything from proof of the existence of a document (http://proofofexistence.com) to distributed domain name registration (http://namecoin.info) to decentralized identity (http://onename.io).

Non-financial Transactions

Non-financial applications often require microtransactions (on the order of pennies) or placeholder transactions on a virtual currency network to timestamp an event / prove to the world that a given action was performed at a given time. These transactions are only used as a way to accomplish “distributed timestamping” and are not at all meant to result in the exchange of value.

As we see it, non-financial transactions fall within one of several categories:

a) **“Money-burning” transactions:** transactions in which the underlying coin loses it’s value as money permanently. This action is irreversible and cannot be used for money transmission. We use this type of transaction when registering new usernames.
b) **Fee-only transactions:** transactions that only have a fee for miners and do not result in any value being moved from address to address. We use this type of transaction to update the data (user profiles) associated with usernames or to initiate a transfer of ownership of usernames.
c) **Self-to-self transactions:** transactions on the bitcoin network in which the sole recipient is the sender, thus resulting in value that is not actually moved from one address to another.
d) **User-to-user microtransactions:** transactions that result in a miniscule amount of value (in the order of pennies) being moved between users. We currently don’t use such transactions, but it’s possible that we’ll need to use them in the future.

Exemptions

Based on the descriptions of these various non-financial transaction types, we’d like to recommend that the BitLicense make several exemptions.

It’s easy to see that the first three types of transactions are clearly not able to be used for money transmission, as no funds are ever able to flow from one address to another.

Meanwhile, in the case of microtransactions, we believe that the DFS could come out with clear guidelines for what constitutes an exempt microtransaction and what does not. For example, if the value transmitted is negligible, where “negligible” is clearly defined (e.g. anything less than 10 cents in USD at current market rates of the digital currency), then such non-financial microtransactions could be considered distinct from typical financial transactions, exempting them from following under the purview of the BitLicense.

We believe that it’s important to separate non-financial applications of the blockchain (which require a functional virtual currency) from financial applications. These non-financial applications have the potential to enable a new era of secure and decentralized online services similar to how the Internet enabled distributed services like cloud storage and streaming music. These services could potentially be used by millions of users around the world, so regulating them merely because they share the same underlying technology with virtual currencies could severely limit the ability of entrepreneurs and researchers to innovate.

We’re aware that the DFS is concerned that by allowing tiny transactions to take place outside of the scope of the BitLicense they could potentially be creating a loophole that could be used to transmit funds outside of view. However, we believe that this is highly unlikely, for the reason that these tiny transactions are not financially feasible for moving any kind of money.

To illustrate with an example, if someone planned on moving $100 by breaking it up into 2500 $0.04 transactions, they would have to pay a fee on the order of $0.04 for each and every transaction. Since moving the $100 from location A to location B would require 2500 transactions to split up the money and 2500 transactions to re-join the money, the mover would be left with scattered denominations totalling $50 in the middle of the process and absolutely nothing by the end of the process. Second, if the mover ever wanted to reclaim all of those funds and make any use of them, they'd leave an enormous footprint on the blockchain, with thousands of suspicious addresses and transactions that people would be able to inspect and track. Thus, such transactions should be considered impractical for the movement of any kind of funds. It should be noted that any microtransaction that moves funds that are equal to or less than the minimum accepted network fee (today about $0.04), cannot possibly result in the transmission of any money whatsoever, as demonstrated above. Rather, they would result in the loss of 100% of funds by the time they are rejoined at the end of the process. By extension, orchestrated microtransactions that move funds equal to double the minimum accepted transaction fee would result in the loss of 50% of the total funds by the end of the process, and would still leave an enormous, conspicuous footprint.

As such, we highly recommend that the DFS create an exemption for microtransactions on the blockchain, at minimum for transactions for which the movement of value is equal to or less than double the minimum accepted mining fee on the network.

Conclusion

We congratulate you, Superintendent Lawsky and the Department of Financial Services, for your interest and willingness to work with the virtual currency community and put in the hard effort to develop these regulations.

We eagerly anticipate the amendments to the current regulations, in particular the possibility for exemptions carved out for microtransactions of a non-financial nature, as we believe that it is important for supporting a healthy environment for innovation on top of the blockchain. Further, we believe that it can contribute to New York's standing as a hub for innovation.

We consider ourselves very grateful and fortunate to be able to base our business out of New York, as we love this city and all that it provides, and hope that we may continue to operate in this city and grow our team here in New York.

Thank you for careful consideration and we look forward the updates to the original proposal and what comes next.

Sincerely,
Muneeb Ali and Ryan Shea
Onename (Halfmoon Labs, Inc.)
[redacted]