Via Email

August 05, 2022

Department of Financial Protection and Innovation, Legal Division
Attn: Sandra Navarro
Regulations Coordinator
2101 Arena Boulevard
Sacramento, CA 95834

Re: Invitation for Comments – Crypto Asset-Related Financial Products and Services

Dear Sandra:

ConsenSys Software Inc. respectfully submits this letter in response to the Department of Financial Protection and Innovation invitation for comments. ConsenSys was founded in 2016 after the launch of the Ethereum protocol with the goal of being a force for decentralization on the planet. We believe that, through decentralized networks like Ethereum, humankind can achieve more. We have dedicated our people, products, and resources to help drive this evolution.

ConsenSys is the leading Ethereum software company. We enable developers, enterprises, and people worldwide to build next-generation applications, launch modern financial infrastructure, and access the decentralized web. Our software suite, composed of MetaMask, Infura, Quorum, Truffle, Codefi, and Diligence, serves millions of users, supports billions of blockchain-based queries for our clients, and has handled billions of dollars in digital assets. Ethereum is the largest programmable blockchain in the world, leading in business adoption, developer community, and DeFi activity. On this trusted, open source foundation, people around the world are building the digital economy of tomorrow.

As the great state of California works to establish a framework to foster responsible innovation, bolster its innovation economy, and protect consumers, we encourage policymakers across government to pay attention to the innovation in the programmable blockchain ecosystem. This ecosystem not only offers the opportunity for economic growth but also the potential to make the internet more open, egalitarian, private, and secure.

We view this letter as the start of a conversation, and we hope to engage with you in greater depth on the summarized points set forth below. We appreciate the opportunity to collaborate with you on the important task of bolstering innovation while mitigating the risks that new technologies may present. You may contact us at [redacted] at your convenience.

Regulatory Priorities

1-5. What steps should the DFPI take to better protect consumers from scams and fraud, improve consumer education and outreach, ensure consumer protection, and ensure investor protection associated with crypto asset-related financial products and services?

Web3 front end interfaces that facilitate consumer engagement with on-chain smart contracts perform a valuable service today and will undoubtedly continue to. Given the already complex ecosystem of permissionless blockchains, composable smart contracts, and user-friendly web-based interfaces, end users today largely have to trust the web-based interfaces to be honest, secure, and reliable. Users could be better served if the industry, in consultation with regulators, developed standards around these interfaces to better protect users from bad actors, security vulnerabilities, and other risks. It is critical that the right balance be struck between fostering innovation and user protection, and that requires a thoughtful, iterative approach.

There are new tools native to the crypto ecosystem that allow law enforcement to more effectively detect, track, and identify criminals that are using blockchain networks to commit crimes and abscond with illicit gains. These approaches generally do not rely on the traditional model of deputizing middlemen to require users to identify themselves, monitor transactions, and report suspicious behavior. Instead, law enforcement is growing more proficient at leveraging new software tools that reveal the transactional transparency of public blockchains. That these tools continue to develop responsibly, and continue to be used by law enforcement responsibility and according to the rule of law, is important for the welfare and safety of users of these blockchain ecosystems.

6. What steps should the DFPI take to address climate risks posed in the offering and provision of crypto asset-related financial products and services?

The DFPI will need to clearly understand the differences between the many crypto and their supporting blockchain technologies. As the crypto ecosystem matures, questions have arisen about the sustainability, security, and scalability of its leading networks. The Ethereum ecosystem anticipated these concerns. From its early days, core developers viewed Proof of Stake (PoS) as the mechanism to secure Ethereum's future. Ethereum will be completing the transition to PoS in the upcoming months, which brings several improvements that have been developed for years. One improvement that we eagerly anticipate involves far less energy usage.

Today, Proof of Work (PoW) consensus on Ethereum currently consumes 47.31 TeraWatt Hours per year (the energy equivalent of Hong Kong). In contrast, a PoS Ethereum is predicted to consume 2.62 MegaWatt Hours yearly, which is as much as your average small American town (around 2100 homes).

Additionally, it is anticipated that further advances in blockchain transaction scaling solutions (such as rollups and sharding) will help further decrease the energy consumed per-transaction by leveraging economies of scale. In other words, as PoS will make consensus less energy intensive, scaling solutions will allow the Ethereum protocol to secure far more transactions in each block than it does today.

A powerful argument could be made that the benefits flowing from a global, permissionless computational network like Ethereum would even make continued PoS consensus worthwhile. But that argument soon will be moot. Ethereum's current mainnet will merge with the PoS testnet that has been functioning for quite some time. When it does so, the energy used by the largest programmable blockchain in the world will plummet, while the network itself should get more robust as the energy and equipment needed in order to support the network will become less onerous.

7. How should the DFPI strive to harmonize its regulatory approach to crypto asset-related financial products and services with federal authorities?

The DFPI can coordinate closely with federal entities and emulate practices that have proven successful. Several aspects of U.S. crypto businesses help explain why they have been competitive to date in the global crypto market. Among them are the following:

- Operating under the rule of law which enforces contractual rights, protects free expression, limits government caprice, and ensures disputes are reliably adjudicated;
- Entrepreneurial culture where calculated risk taking and exploring new ideas and spaces is valued;
- Highly skilled labor that has the expertise to push this technology to new capabilities and use cases;
- The ability for flexible working arrangements, thereby being able to hire the best talent from all over the world;
- Access to the state of the art technology that can be leveraged to build these new ecosystems; and
- Access to strong capital markets that encourage investment in new and different ideas, including in-flows of foreign investment in US-based projects.

8. In developing a comprehensive regulatory approach to crypto asset-related financial products and services, how should the DFPI work with other state financial regulators to promote a common approach that increases the reach of DFPI's consumer protection efforts and reduces unnecessary burdens, if any, on companies seeking to operate nationwide?

Here are a few considerations that will promote a common approach throughout the state, increase consumer protection efforts, and contribute to the success of crypto businesses:

- A legal framework, traditions, and cultural norms that place high value on personal autonomy, commercial freedom, and privacy;
- Best in the world education system that can teach the next generation how to participate in and benefit from this new technology;
- A critical mass of artists and creators who will want to leverage blockchain's disintermediation to derive more benefit from their creative endeavors;
- A mature e-commerce marketplace that can pivot more easily to more efficient, more accessible blockchain payment mechanisms;
- A sophisticated financial sector that can increase its efficiency and accessibility through migrating to blockchain rails; and
- Highly capable criminal justice system that can go after criminals in this new space as well if not better than any other jurisdiction.

9. How can the DFPI make California the most desirable home state for responsible companies when developing guidance and, as appropriate, regulatory clarity and supervision of persons involved in the offering and provision of crypto asset-related financial products and services in California?

Software developers who are creating protocols and related software that the whole world can use can essentially work from anywhere and hire people from anywhere. They will be incentivized to work from and hire from jurisdictions which best serve their development vision. While California is an attractive destination for developers for many reasons, including those set forth above, jurisdictions that have more pro-blockchain innovation regulatory approaches will, over time, inevitably attract more and more of the best projects and talent. For a jurisdiction to be a leader in this space, it need only have reliable electricity and internet service—the base inputs for software development—and one or more reasons that developers would want to work from there. The first thing California can do to solidify its place as preeminent jurisdiction for developers is alleviating software developers' concern that their open source project will snag some inconspicuous regulatory trip wire and result in severe legal consequences.

10. How should the DFPI ensure that California values of inclusive innovation and equity-focused consumer protection are core components of crypto asset-related financial products and services as it develops guidance and, as appropriate, regulatory clarity and supervision of those persons involved in the offering and provision of crypto asset-related financial products and services in California?

In the interest of promoting innovation and growth, attracting talent, participating in the value creation of these new systems, and standing firm behind notions of free expression and personal autonomy, California should be unequivocal and steadfast in its commitment to liberal rules concerning software development and end user access to permissionless, global networks.

At its heart, crypto is about peer-to-peer transactions that are possible because code replaces the traditional intermediary. The creation of disintermediated systems is an ambitious task that involves developers around the world dedicating a lot of time and learning from considerable trial and error. While it might be a fair criticism today to say that some of "crypto" is more centralized than decentralized, there are impressively decentralized spaces, and they have been growing bigger and more compelling with time. A traditional regulatory framework that deputizes intermediaries simply will not work when the actual intermediary is simply open source computer code. In response to this challenge, some may advocate for regulating the development of protocol and smart contract code itself, and perhaps even restrictions on the types of permissionless protocols or smart contracts that U.S. end users may lawfully use. These are dangerous propositions, not in the least because restricting U.S. developers and U.S. end users will not change the fact that you can develop and use these blockchain applications from almost anywhere else in the world. One of the most serious threats to the productive growth of this new technology over the coming years will be government policy unduly restricting the development and/or the use of permissionless blockchain software.

Additionally, digital assets improve international payments (including trade and remittances), and improve access to financial services for people that are not able to utilize traditional banking methods. Remittances have proven to be far more efficient—both in terms of time and dollar value—using blockchain technology. This is of huge value to California workers with families abroad. Bolstering (or at least not thwarting) their ability to use these payment options will be of great benefit to them, thus encouraging workers to stay and be productive.

Market-Monitoring

16. The Executive Order directs the DFPI to conduct a market-monitoring inquiry to solicit voluntary information from companies and licensees about their cryptocurrency-related financial products and services to assist DFPI in carefully undertaking any future efforts, including formal rulemaking under the CCFPL. The DFPI invites input and comments on the market-monitoring inquiry.

The DFPI should consider the prospect of the government using blockchain systems as surveillance mechanisms as a potential major (and disturbing) obstacle. The U.S. traditionally has valued financial privacy, but those traditions have been eroding in recent decades as more of our financial lives move online, serviced by large intermediaries from which the government requires under certain circumstances disclosures about our financial affairs. Seeing meaningful financial and commercial activity move to transparent and readily auditable public ledgers would mean that, without improvements to privacy technology, the government would be left to restrain itself from prying into the transactional lives of everyday law-abiding Americans. Two things should be done to avoid this outcome. First, the measures and principles that have been woven into federal statute to preserve privacy and commercial freedom should be likewise a core part of legislative and administrative rulemaking concerning crypto. Second, the government should embrace rather than react suspiciously towards the crypto industry's efforts to develop more effective privacy technology.

Respectfully Submitted,

CONSENSYS SOFTWARE INC.

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