Vanessa Countryman, Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-0609

Re: Proposed Amendments to Exchange Act Rule 3b-16 (Release No. 34-94062; File Number S7-02-22)

Dear Ms. Countryman,

As an American taxpayer, retired technology exec, and business school professor, I have grave concerns with, and opposition to the SEC's proposed amendments to Regulation ATS issued on January 26, 2022 (the "Proposal").

The Proposal includes a revised and vastly expanded definition of "exchange" which could dramatically expand the SEC's authority to regulate technologists who "make available" peer-to-peer "communication protocols" used in decentralized finance. These technologists and the system they create are not and cannot feasibly become regulated securities intermediaries or alternative trading systems ("ATSs"), and thus the proposed amendments amount to a back-door prohibition of a vast swathe of actual and potential peer-to-peer finance protocols.

Overview of peer-to-peer communications protocols:

Peer-to-peer communication protocols may include automatic-market-making "smart contracts" ("AMMs") which are permissionlessly accessible on Ethereum and other decentralized blockchain systems. These "smart contracts" are simply machine-readable code that is stored on a distributed ledger and will be executed by miners or validators (on an anonymous, decentralized basis) for users who pay fees as part of cryptographically signed transaction messages (on an anonymous, decentralized basis). Once written and deployed to a blockchain, no person controls or can limit access to such smart contracts. Even the miners–who are necessary to run the smart contract code–do not individually have the power to limit access to these smart contracts nor surveil the users of these smart contracts. Unlike a broker/dealer or other securities intermediary, neither the code developers nor the miners have a contractual or fiduciary relationship with the users. A redesign of the system which requires an off-chain relationship between miners/validators, on the one hand, and users, on the other hand, would defeat the entire purpose of this technology by requiring users to have trust in and expose their personal data to the miners/validators. When Congress intended in creating the Securities Exchange Act of 1934, it cannot have intended to mandate intermediation or to prohibit people from transacting in digital assets on a peer-to-peer basis using new technologies.

Peer-to-peer communications protocols encompassed in the Proposal:

In AMMs, users may indicate their "non-firm trading interest" in selling certain digital assets by depositing digital assets into a smart contract (i.e., cryptographically signing a transaction whereby the smart contract code will release the tokens to new users if specified conditions are met). This facilitates trustless, disintermediated trading of digital assets and ensures that users are not trapped in illiquid positions in their digital asset holdings. When the relevant conditions are satisfied (usually a user on the buy-side sending a transaction message plus a digital asset purchase amount), a trade is automatically

executed. Thus, an AMM may resemble "a system that electronically displays continuous firm or non-firm trading interest….to sell or buy [a digital asset]...[which] can….be executed immediately[1]."

Since the SEC also maintains that certain digital assets are securities[2], this means that persons who "make available" AMMs or interfaces for utilizing AMMs may now be required by the SEC to register those AMMs as ATSs or securities exchanges. This may include:

- individuals and private entities who write and publish smart contract code as a hobby or business, who may have no training in the securities industry, may not work for a broker-dealer and may not otherwise be subject to the jurisdiction of the United States;
- individuals and private entities who run "miners" or "validators" on the underlying blockchain where the AMM is stored (i.e., persons who have configured computers to automatically perform mining and validation services on the network, with minimal human oversight);
- persons who provide liquidity to such AMMs (since the AMM cannot operate without their participation);
- persons who run websites which facilitate use of AMMs;–including academic "block explorers" with smart contract interaction functionality
- persons who write "blockchain client software" which is run by independent miners/validators and enables general mining, validation and transacting on the blockchain network.

None of these persons are securities professionals or intermediaries as currently understood. Furthermore, they would be unable to comply with existing regulations–such as obtaining and maintaining records about the legal identities of "subscribers"–applicable to securities exchanges and ATSs as the systems themselves are pseudonymous by virtue of their cryptographic security. These systems are designed to give users a way to exchange digital assets without hiring a broker/dealer or placing their assets into another person's custody–thus, these systems are also designed to avoid any persons having powers similar to a broker/dealer or exchange operator.

Accordingly, regulating these systems as "exchanges" would be tantamount to banning them in their current form. Although the SEC has broad authority, it does not have authority to determine which technologies are legal or illegal to "make available." But such would be a potential perverse effect of this amendment.

I urge you to reconsider the over-broad provisions in the Proposal. This sweeping expansion to the definition of "exchange" to apply to any communication protocol system (not limited to just autonomous cryptosystems or block explorers) is an impediment to innovation; it would ultimately force builders and users of decentralized finance systems like me to leave the United States or devote our skills and effort to companies and technologies being built outside of the United States–a nation-wide "brain drain" of cutting-edge technologists from which the United States might never recover.

Thank you for your consideration.

Respectfully Submitted,

John Fyles

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[1] The Proposal, page 20; Statement on Government Securities Alternative Trading Systems.

[2] Committee on Banking, Housing, and Urban Affairs Oversight of the US Securities and Exchange Commission September 14, 2021, page 9.