



Mr. Daniel J. Harty
Director, Office of Capital Markets
U.S. Department of Treasury
1500 Pennsylvania NW
Washington, DC 20220

August 8, 2022

Re: Developing a Framework on Competitiveness of Digital Asset Technologies (Docket No. 220509-0112)

Dear Director Harty,

The Proof of Stake Alliance (POSA) appreciates the opportunity to provide feedback to the Department of Treasury as the Department works to develop a framework on competitiveness for digital asset technologies in response to Executive Order 14067, “Ensuring Responsible Development of Digital Assets.” Proof-of-stake technology is the future of digital asset innovation and will play a critical role in driving mass adoption of digital assets while serving as a driver of equitable economic growth. As digital asset technologies mature, U.S. leaders should encourage a system that is scalable, sustainable, benefits the most people, and allows every American to participate in financial innovation. These goals can all be achieved through an increased adoption of proof-of-stake technology, which is essential for the digital asset ecosystem to reach its full potential.

While POSA’s comment addresses a broad set of issues related to the future of digital asset businesses, we specifically address the following questions posed by the Department:

- Question #1: What factors or conditions will help facilitate mass adoption of digital assets in the future?
- Question #3: What are the opportunities created by digital assets for consumers, investors and businesses?
- Question #6: How can digital assets play a role in increasing underserved Americans’ access to safe, affordable, and reliable financial services?

About POSA

POSA is an action-oriented industry alliance advocating for forward-thinking regulation of the growing proof-of-stake ecosystem. POSA brings together industry leaders, innovators, academics, service providers, and legal experts to amplify the voices of those who participate in



proof-of-stake protocols, educate key decision makers, and collaborate across our campaigns, with a particular commitment to educating and advancing policy discussions regarding tax and regulatory issues.

Proof of Stake Overview and Benefits

Proof of Stake is a rapidly growing, 99% more energy efficient, next-generation blockchain consensus mechanism. Every blockchain or distributed ledger is simultaneously maintained across a dispersed network of servers, often referred to as nodes. New groups of transactions (blocks) are recorded on the ledger and constantly monitored by nodes to ensure accuracy. Consensus mechanisms are an established set of rules for how blocks can be added in an accurate and decentralized manner. Proof of Stake requires those who own native tokens of a given proof-of-stake blockchain to temporarily commit (or “stake”) tokens for the opportunity to validate transactions and add new blocks to the blockchain. In exchange, those “validators” or “stakers” are rewarded with newly created tokens as a direct result of their work. Proof of Stake allows for broad participation as anyone with digital assets willing to put in the time, effort, and resources can help validate transactions and create rewards as a validator.

The technological advantages associated with Proof of Stake have fueled the growth of blockchain technology and powered a range of novel web3 projects. Proof of Stake is not only continuing to grow as a share of the overall blockchain market, but it is also the preferred method for emerging blockchain applications. For example, 19 of the 20 largest smart contract platforms are powered by proof-of-stake consensus mechanisms, including networks like Cardano, Ethereum 2.0, Solana, Tezos, Polkadot and Avalanche.¹

The growth of Proof of Stake has allowed the growth of an entire American-based ecosystem of developers and companies involved in its development. Firms that facilitate staking, such as Blockdaemon and Coinbase Cloud, have created billions of dollars of value, employ hundreds of people, and have generated significant investment in the United States.² Value has also been created through an entire ecosystem of web3 applications being built on proof-of-stake networks. One example is NFT marketplaces, as U.S.-based companies Magic Eden and OpenSea have received multi-billion dollar valuations, significant investment, and created hundreds of jobs.³

¹ See Staking Rewards, “Staking Ecosystem Report 2021,” *available at* <https://cms.stakingrewards.com/wp-content/uploads/2021/10/2021-Staking-Ecosystem-Report-1.pdf>.

² See Coindesk, “Crypto Infrastructure Firm Blockdaemon Raises \$207M at \$3.25B Valuation” (January 26, 2022) *available at* <https://www.coindesk.com/business/2022/01/26/crypto-infrastructure-firm-blockdaemon-raises-207m-at-325b-valuation/>; and The Block, “Coinbase Cloud has \$30 billion in crypto assets staked across 25 blockchains,” *available at* <https://www.theblock.co/linkedin/126104/coinbase-clients-staking-more-than-30-billion-crypto-assets>.

³ See CoinDesk, “NFT Marketplace Magic Eden’s \$1.6B Valuation, Partnership With Solana’s Web3 Phone ‘Saga’” (June 24, 2022), *available at*

The industry is set to continue growing and generating further jobs and investment, and American policymakers should fight to ensure that growth occurs in America instead of in competing countries. As more people continue to participate in proof-of-stake technology, our national strategy should ensure policymakers foster innovation and domestic growth in Proof of Stake in any national strategy for digital assets.

Factors for Mass Adoption (Question #1)

Mass adoption of digital assets in the U.S. depends on multiple factors. The underlying technology must be able to effectively function at scale, there must be a suite of useful applications that drive participation, and policymakers must create a clear, fair, and consistent national regulatory framework that allows the technology to flourish responsibly.

Scalable digital assets not only require blockchains that can handle billions of transactions, but must also be able to do so in a way that is compatible with a future low-carbon economy. Proof-of-stake technology makes mass adoption possible by allowing scalable systems that use less energy, have lower latency, and are more secure. Scalability has been a concern since the inception of blockchain technology, in part due to the energy demands of proof-of-work blockchains. As early blockchains operate at a global scale, many have expressed concern over the energy consumption of mining operations.⁴ Proof of Stake uses 99% less energy than proof-of-work blockchains (like Bitcoin) because proof-of-stake consensus mechanisms eliminate the need for the energy-intensive mining process altogether by prioritizing network participation over computing power to validate transactions.⁵ Successful proof-of-work mining requires solving algorithms of increasing computational intensity, which encourages mining operations to maximize their computing power and associated power usage. In contrast, while proof-of-stake validators must invest time, effort, and digital assets, validating does not require significant energy usage. This allows proof-of-stake blockchains to scale in a way that supports mass adoption and promotes larger and more diverse participation, while also maximizing energy efficiency.

[https://www.coindesk.com/video/coindesk-spotlight/nft-marketplace-magic-edens-1-6b-valuation-partnership-with-solanas-web3-phone-saga/#:~:text=Web%20Phone%20'Saga',NFT%20Marketplace%20Magic%20Eden's%20%241.6B%20Valuation,With%20Solana's%20Web%20Phone%20'Saga'&text=Magic%20Eden%2C%20the%20leading%20non,at%20a%20%241.6%20billion%20valuation.](https://www.coindesk.com/video/coindesk-spotlight/nft-marketplace-magic-edens-1-6b-valuation-partnership-with-solanas-web3-phone-saga/#:~:text=Web%20Phone%20'Saga',NFT%20Marketplace%20Magic%20Eden's%20%241.6B%20Valuation,With%20Solana's%20Web%20Phone%20'Saga'&text=Magic%20Eden%2C%20the%20leading%20non,at%20a%20%241.6%20billion%20valuation.;); TechCrunch, “NFT kingpin OpenSea lands monster \$13.3B valuation in new raise,” (January 4, 2022), *available at* <https://techcrunch.com/2022/01/04/nft-kingpin-opensea-lands-13-3b-valuation-in-300m-raise-from-paradigm-and-coatue/>

⁴ See The New York Times, “Fight Looms Over New York’s Bid to Slow Crypto-Mining Boom” (June 7, 2022), *available at* <https://www.nytimes.com/2022/06/07/nyregion/cryptomining-ban-ny.html>.

⁵ See Ethereum Foundation Blog, “Ethereum’s energy usage will soon decrease by ~99.95%” (May 18, 2021), *available at* <https://blog.ethereum.org/2021/05/18/country-power-no-more/>.

Beyond technological features, mass adoption of digital assets also requires innovative applications that incentivize more users to participate. Proof of Stake makes novel applications possible due to its scalability, speed of operation, and the low cost of conducting transactions on the blockchains. These benefits mean proof-of-stake networks serve as critical enabling infrastructure for novel blockchain use cases. Emerging proof-of-stake blockchain applications include faster and more affordable interbank transfers, novel digital assets (like NFTs), real-time tracking in the aviation supply chain, and automated smart contracts such as weather insurance for subsistence farmers.⁶ Agencies like the Department of Homeland Security have identified blockchain applications to improve identification verification and supply chain management.⁷ Proof-of-stake networks do more than simply make previous blockchain applications more efficient. Their operational efficiency and lower cost enable new, bold ideas to be implemented at an even larger scale.

Lastly, the greatest barrier to widespread adoption and growth of proof-of-stake networks in the U.S. is a lack of clear rules and patchwork regulations. For example, the IRS has still refused to issue official guidance on how staking rewards are to be taxed. As digital asset technology continues to improve and fuel further growth, developers and investors in proof-of-stake technology need to know how their businesses will be taxed and treated in the U.S., as do everyday Americans who want to participate in and benefit from these technologies. Proof of Stake will continue to create jobs, generate tax revenue, and foster innovative blockchain applications. Clear, consistent guidelines are critical for ensuring digital asset markets grow, innovate, and serve the largest number of people.

Opportunities for Consumers, Investors, and Businesses (Question #3)

The rapid improvement of distributed ledger technology enabled by Proof of Stake creates opportunities for businesses and consumers to create jobs and value by participating in the technology's growth. American leaders should fight to ensure growth occurs in the U.S. instead of being pushed abroad, which can be fostered through clear, consistent regulations. Innovation-friendly rules will encourage businesses to grow in America and allow everyday Americans to create wealth by participating in the technology's growth.

⁶ See <https://www.corda.net/info/reconciliation/spunta/>; Decrypt, "Solana NFT Marketplace Magic Eden Raises \$130M, Plans Multi-Chain Expansion" available at <https://decrypt.co/103403/solana-nft-marketplace-magic-eden-raises-130m-plans-multi-chain-expansion>; see <https://www.aerotrax.com/>; see Lemonade, "Lemonade Crypto Climate Coalition to offer climate insurance to the world's most vulnerable farmers" (March 22, 2022) available at <https://investor.lemonade.com>.

⁷ See U.S. Department of Homeland Security, "Silicon Valley Innovation Program: Blockchain Portfolio" available at <https://www.dhs.gov/science-and-technology/blockchain-portfolio>.

Digital asset technology companies are already a source of American economic and job growth, but a lack of clear rules and regulations could encourage the industry to become globally distributed as entities move to jurisdictions with innovation-friendly policies. For example, many of the largest networks that use or are switching to Proof of Stake are associated with companies or foundations located internationally. Countries like Switzerland, which is home to many major entities supporting proof-of-stake networks, have attracted these organizations through innovation-friendly rules and competitive tax rates.⁸ Notably, Switzerland’s primary financial regulating authority has established clear rules on digital asset governance, which encourages long-term investment by digital asset companies.⁹ The country took a proactive approach in creating ‘technology neutral’ rules that allowed the industry to flourish and is now reaping significant benefits.¹⁰

Consider the benefits the United States has experienced from being home to the largest computing and internet technology companies. By attracting the world’s best talent, an innovation-friendly regulatory environment, and a robust investment ecosystem, previous generations of technological innovators started and grew their companies in the United States. In a few short decades, those firms have rapidly scaled and created trillions of dollars in value and millions of jobs. Just as importantly, America has reaped unquantifiable cultural, geopolitical, and social benefits by being the world’s technological leader. As CFTC Chair Rostin Behnam recently testified, “The need to uphold American leadership and stewardship of [digital assets and blockchain technology] is clear. Critical issues, such as national security, trade, and effectively addressing climate change risks, to name a few, will also be at stake.”¹¹

In addition to fostering domestic growth and creating strategic value for the United States, the growth of proof-of-stake technologies creates opportunities for American consumers to create jobs and value. Everyday Americans are able to contribute to and benefit from proof-of-stake technologies, and these opportunities continue to expand as the industry matures. Anyone can participate as a validator, even those with few assets, which means there are few barriers to entry. Policymakers should make sure federal regulations and rules do not create any unnecessary barriers. For example, a lack of clarity on how staking rewards are taxed, which is described

⁸ See The Financial Times, “Why is Switzerland so Keen on Cryptocurrencies?” *available at* <https://transact.ft.com/cryptocurrencies/>.

⁹ See Coinfirm, “Switzerland Crypto Regulations: KYC, Taxes & FINMA,” *available at* <https://www.coinfirm.com/blog/switzerland-crypto-regulations/#>.

¹⁰ See Forbes, “How The Swiss Government Is Helping Bitcoin Grow Up,” (April 29, 2022), *available at* <https://www.forbes.com/sites/martinrivers/2022/04/29/how-the-swiss-government-is-helping-bitcoin--blockchain-technology-grow-up/?sh=2f9d9d3d3aeb>.

¹¹ See CFTC, “Testimony of Chairman Rostin Behnam Regarding ‘Examining Digital Assets: Risks, Regulation, and Innovation’” (February 9, 2022) *available at* <https://www.cftc.gov/PressRoom/SpeechesTestimony/opabehtnam20>.



more fully later on, has created legal and administrative barriers for Americans who want to build wealth through participating in proof-of-stake networks.

Equitable, Affordable, Reliable Services (Question #6)

Proof of Stake technology was designed to allow a broader and more diverse population to participate in the growth of digital assets, thereby creating greater inclusion for historically underserved groups. Recent polling not only finds that one in five Americans have participated in crypto, but that participation rates are twice as high for Black Americans.¹² Additionally, 37% of underbanked Americans own cryptocurrency compared to 10% of fully-banked Americans, demonstrating the attractiveness of digital assets to financially disadvantaged populations.¹³

Not only does Proof of Stake enable broader participation in purchasing digital assets, it also allows anyone to secure the protocol by helping to validate transactions in a proof-of-stake network. Proof-of-Stake blockchains do not require high-powered computers, industrial-grade mining operations, or complex technical skills to serve as validators. Even participants with small amounts of digital currencies can delegate their tokens and receive a share of rewards for validating new blocks. Staking services are now offered on many major cryptocurrency exchanges in a consumer-friendly manner. Any U.S. regulatory framework should account for this growing population and create sensible rules that encourage broad-based participation in growing proof-of-stake technology.

A Thriving Digital Assets Market Requires Clear, Innovation-Friendly Rules and Guidelines for Proof of Stake

Currently the U.S. suffers from a lack of consistent guidance that can encourage the development of a thriving, inclusive digital assets ecosystem. As U.S. policymakers work to craft a ‘whole-of-government’ regulatory approach, it is important to ensure any framework prioritizes fostering proof-of-stake technology to enable wider adoption and more equitable participation in digital assets.

Fair Taxation of Staking Rewards

¹² See CNBC, “One in five adults has invested in, traded or used cryptocurrency, NBC News poll shows,” (March 31, 2022), *available at* <https://www.cnbc.com/2022/03/31/cryptocurrency-news-21percent-of-adults-have-traded-or-used-crypto-nbc-poll-shows.html>.

¹³ See Morning Consult, “Banking the Unbanked Requires Raising Trust and Awareness. For the Underbanked, Better Service Means Payments Innovation,” (August 17, 2021), *available at* <https://morningconsult.com/2021/08/17/trust-awareness-payments-unbanked-underbanked/>.

One of the most pressing issues for Americans engaged with proof-of-stake blockchains is the lack of clear and fair guidance on the taxation of staking rewards despite years of requesting clarity from federal agencies. As described in this comment’s overview of Proof of Stake, new blocks of transactions as well as new tokens are created by stakers who validate the accuracy of the blockchain. The correct classification and taxation of these reward tokens is critical for tax fairness and the future of American participation in this technology. Staking rewards are central to any proof-of-stake business and a key motivator for everyday Americans who serve as stakers. Whereas countries like Australia, Finland, New Zealand, Norway, and Switzerland have all created official rules for when staking rewards are to be taxed, the IRS has failed to provide any clear guidelines.¹⁴ A number of congressional leaders have asked the IRS for explicit guidance in letters dating back to 2020.¹⁵ A 2021 federal lawsuit over staking rewards between the IRS and an American staker, Joshua Jarrett, resulted in the IRS offering to return the tax payments on Mr. Jarrett’s unsold staking rewards, thereby suggesting those rewards should only be taxed when sold.¹⁶ However, the IRS has refused to provide clear, forward-looking guidance to resolve this issue for all stakers.

Unclear tax guidelines for staking rewards not only create inconsistent tax policy, they also inhibit the growth of proof-of-stake networks and discourage Americans from participating. Staking rewards are newly created property, and, like all other created property, should only be taxed at the time of sale. Just like art created by an artist or a cake made by a baker, created property is only taxed when sold. In addition to being inconsistent with existing tax law, taxing staking rewards when they are acquired results in overtaxation, and would create confusion and an administrative burden for participants in proof-of-stake technologies. Given the rapid rate at which some validators create rewards and the shifting prices of digital assets, recording and accounting tax payments would be overly complex and increase the barrier to entry for everyday Americans. Not only that, but such a tax policy would require staking participants to regularly sell staked assets to meet their tax liability. Such transactions would slow the growth of proof-of-stake networks and could also create unnecessary price volatility in digital assets, as stakers are forced to sell their holdings on a regular basis to ensure they can meet their tax liability.

Without clear guidelines, potential stakers and proof-of-stake companies do not know how their activities will be taxed in the U.S., which impedes growth and encourages them to relocate

¹⁴ See The Law Library of Congress, “Taxation of Cryptocurrency Block Rewards in Selected Jurisdictions” (January 2021), *available at* <https://tile.loc.gov/storage-services/service/l1/l1glrd/2021666100/2021666100.pdf>.

¹⁵ See “Letter to Commissioner Charles P. Rettig” (July 29, 2020), *available at* <https://www.proofofstakealliance.org/wp-content/uploads/2022/03/Final-Proof-of-Stake-IRS-Letter-7.29.20.pdf>.

¹⁶ See Proof of Stake Alliance, “IRS Waves White Flag in Lawsuit Over Taxability of Cryptocurrency Rewards” (February 3, 2022) *available at* <https://www.proofofstakealliance.org/wp-content/uploads/2022/02/POSA-Press-Release-Feb-3-2022.pdf>.



elsewhere. Creating clear, transparent tax laws for staking rewards will foster further innovation in digital assets and help drive greater participation and accessibility.

Conclusion

POSA appreciates the Treasury Department's effort and looks forward to working with policymakers throughout the federal government to help develop a national strategy that maximizes the positive impact of digital assets on our broader financial system. POSA is committed to continuing to advocate for policies that allow the United States to remain a world leader in proof-of-stake technology, and we are always available as a technical resource for the Treasury Department as it finalizes its regulatory framework. Any effective framework that results in consistent, whole-of-government rules and guidelines for Proof of Stake and other digital asset technologies will benefit future generations of Americans by allowing for more innovative, inclusive, and beneficial financial infrastructure.

Sincerely,

Alison Mangiero
Executive Director
Proof of Stake Alliance