Written Testimony of Alex Miller

Chief Executive Officer, Hiro Systems PBC

American Innovation and the Future of Digital Assets: A Blueprint for the 21st Century

Before the U.S. House Financial Services Committee Subcommittee on Digital Assets, Financial Technology, and Artificial Intelligence and U.S. House Committee on Agriculture, Subcommittee on Commodity Markets, Digital Assets, and Rural Development

May 6, 2025

I. Introduction

Chairman Steil, Ranking Member Lynch, Chairman Johnson, Ranking Member Davis, and Members of the Subcommittees:

Thank you for inviting me to testify at today's hearing. My name is Alex Miller, and I am the CEO of Hiro Systems PBC, a company that makes tools for developers building decentralized applications on top of the Bitcoin and Stacks blockchains.

I've spent the last 15 years of my career helping software developers build new technology. This includes eight years at Stack Overflow, the largest knowledge-sharing community in the world for developers, where I ran numerous parts of the business that enabled more than 50 million people per month to collaborate with their co-workers and strangers around the world. I've also been a founder, employee, advisor, or board member of startups and non-profits both large and small.

I'm an ardent and true believer in the power of free markets to unleash human potential. There has never been a force as powerful for improving the lives of billions of people as the last hundred years of capitalism and markets, which has allowed the ingenuity and creativity of builders to unleash a pace of advancement we've never seen before.

At Hiro, we believe that the more you can enable easy, fast, and simple interactions between people, the more you can build and the more opportunity you can create for everyone. Blockchain technology has the potential to do this by facilitating more efficient, distributed, and secure financial transactions for consumers and financial institutions across the globe. We in the

United States are fortunate to have access to legal and capital markets that many across the world do not -–markets that have helped maintain our position as the technological and economic leader for generations. The potential of blockchain technology to create open markets globally is what makes its development an inevitability; there is too much promise and potential for it not to happen. The only question is whether the US will be at the forefront of this next evolution, embedding our values in its DNA, and once again harness technology to increase our prosperity.

We also believe in building it right. Hiro was the first company, and the only still-operating, to qualify a Regulation A offering with the Securities and Exchange Commission (SEC) for sales and distributions of tokens,[1] an integral part of blockchain networks. That experience gives us a unique ability to provide insights into what needs to change to support development of the industry.

We believed from the outset that our network and operations needed to comply with the federal securities laws and regulations. We found, however, significant roadblocks and a lack of clarity within the SEC's processes, which were unnecessarily time consuming because they involved repetitive rounds of inquiries and apparent lack of coordination. In addition, when we sought to exit the reporting regime, the SEC staff could not provide clear guidance on when and how to do so. Hiro was also ill-served by the absence of a clear pathway for sales of its digital assets on exchanges. Further, some of the disclosure and financial reporting requirements imposed on Hiro were onerous without providing token purchasers and holders meaningful protections.

Hiro's experience reveals unnecessary obstacles that, in our view, Congress could help alleviate by taking the following steps:

- Congress should provide a regulatory framework and mandate that the SEC adopt rules for digital asset offerings that are clear, appropriate for the unique nature of digital assets and their networks, and minimizes uncertainty.

- Congress should adopt, or require the SEC to adopt, a clear legal standard for exiting any registration, qualification, or reporting regime for digital assets – including because a network is "decentralized" and so should no longer appropriately be responsible for ongoing reporting, as discussed below.

- Congress should adopt rules to clarify that programmatic sales of digital assets (i.e., pre-programmed sales made through exchanges in blind bid/ask transactions) by an issuer are

[1] Hiro qualified its token offerings under Regulation A under the Securities Act of 1933, which is an exemption designed to enable companies to raise capital without incurring the more burdensome registration and reporting requirements applicable when a company conducts an initial public offering. We believe the lessons of our experience apply not only to Regulation A but other offering mechanisms that the SEC or Congress might consider for digital assets.

not securities transactions subject to the federal securities laws and specifically SEC registration or qualification.

- Congress should require the SEC to adopt standards for disclosures and financial information that evolve over the lifecycle of a project so as to provide purchasers appropriate material information about blockchain networks and digital assets but not be overly burdensome on issuers, particularly those that are early-stage companies.

Separately, from the disclosure considerations, in order to foster the most vibrant open ecosystem, Congress should protect the right for developers to contribute to the deployment of open-source software without attribution of liability for third party use.

I discuss these requests in more detail below.

II. Hiro's History and Background on the Digital Asset Offering Process

Hiro's mission is to provide developers crucial infrastructure and tools needed to create applications and utilities using a layered solution, with Bitcoin's network at the base, that will, in turn, build a stronger digital global economy and facilitate better, more efficient transacting. Hiro, then known as Blockstack, began by building the first version of our "Stacks" blockchain, which was deployed in October 2018. Stacks is one of the first, and still largest, Bitcoin Layer 2 blockchain networks to work towards the vision of scaling the Bitcoin network for billions of users and millions of transactions per day. Because all blockchain infrastructure has limitations as to how much activity they can support, "Layer 2" networks like Stacks exist to bring additional functionality and scale to the most well-known public blockchains (like Bitcoin), by allowing more transactions to happen faster and for a lower cost on a separate chain, before being combined into a single transaction on the base blockchain for ultimate security.

Like many blockchain networks, to enable an open and permissionless system, the Stacks blockchain needs a mechanism to provide incentives for miners to perform key functions; as a result, the first version of the network introduced the Stacks token, referred to as STX, which offers a reward for those constructing and validating transactions. Without an incentive mechanism like STX, decentralized networks like the Stacks network simply cannot function. At the time, although we disagreed with this view, the SEC viewed all tokens, such as STX, as securities subject to its jurisdiction, which meant we needed to distribute the STX in compliance with applicable SEC regulation.

We believed deeply from day one that for a generational project to have the strongest base and legitimacy, it needed to be built the "right way" – leaving no doubt about its legal compliance and with open access to all.

For that reason, we chose to make the initial offering of STX through a qualification process with the SEC, under Regulation A. The goal was that anyone, not just the traditional venture capital and institutional investors who can usually invest in an exempt, unregistered offering, could participate. We were the first, and are now the only still-operating, company to complete a token offering qualified by the SEC.

In choosing this path, we hoped to encourage participation in the network and show it was possible for a U.S. company to raise capital through a digital asset with regulatory certainty.

We did not, however, anticipate the difficulty we faced engaging with the SEC in our effort to qualify the token offering. Our process was filled with uncertainty and was extremely protracted, lasting 12 months, far beyond a more typical registration process. This came at tremendous cost to the company – $2.8 million dollars from initiation of the offering process through qualification – and undercut confidence within the industry that engaging with the SEC or its Staff is a good idea.

III. Lessons Learned

We approached the SEC with the intention of complying with the federal securities laws. To date, we have spent well more than $15 million dollars on the offering process, compliance with the reporting regime, and our defense against an unwarranted investigation triggered by our attempts to work with the Staff. **That amount represents more than the entire amount raised through the offering**. Though we walked willingly into the SEC's doors, we were in many ways left with a competitive disadvantage relative to other projects, especially those based outside the U.S.

Based on our experience, I believe that there is limited efficacy for existing registration and qualification processes as a mechanism for a tailored disclosure regime without significant substantive amendments. Below are a number of considerations for future legislation or regulation to address the challenges we encountered.

A. <u>Congress should provide a regulatory framework and mandate that the SEC adopts and implements rules for digital asset offerings</u>

Congress should pass legislation requiring the SEC to adopt and implement rules for digital assets that are clear, appropriate for the unique nature of digital assets and their networks, and minimize uncertainty. Providing clear rules of the road for these entities and assets will enable a more normal process for the offering.

Blockstack did everything it could to facilitate collaborative discussions with the SEC. We initially engaged with the SEC Staff on a number of regulatory concerns and provided analysis with our positions on issues we thought would be of concern to the Staff, with the goals of assuring the Staff of our thoughtful and collaborative approach and receiving constructive feedback regarding their concerns. Following several rounds of productive conversations, the Staff agreed that it was appropriate for us to file our application for potential qualification of the offering, and we started speaking with the Staff responsible for reviewing filings.

This began a long and arduous process. Unfortunately, there was no apparent overlap between the Staff in our initial meetings and the Staff responsible for the review of Regulation A filings, which had evidently not seen the analysis we circulated. This necessitated additional time to discuss the same subset of issues repeatedly. In fact, throughout the process, new Staff were introduced into the conversations on an ongoing basis many times, typically without background or briefing, leading them to submit the questions and comments we had already answered and/or re-open topics that were previously (we thought) closed. We exchanged more than 15 rounds of comments (both written and verbal) with the Staff of different divisions of the SEC during this time. By contrast, registered initial public offerings typically take much less time – it is more typical to have 2-3 rounds of comments, even when a company is raising orders of magnitude more money.

If Congress were to adopt, or direct the SEC to adopt and implement, rules for digital assets that are clear and appropriate for the unique nature of digital assets and their networks, it would minimize uncertainty about its disclosure and financial reporting requirements and reduce the need to engage on compliance questions and seek guidance. This could help prevent the long and costly process Hiro endured.

B. Congress should codify a clear off-ramp from registered or qualified offerings for decentralized network creators

As part of any legislation passed, Congress should provide a means to exit registration or qualification and related reporting. Hiro's difficulties also exemplify how critical that would be to the industry.

Once Hiro's offering was qualified, we determined that we would, within a short period of time, achieve a "decentralized" network and may not appropriately be responsible for ongoing reporting regarding the STX tokens and network. The premise was that once the network operated independently of Hiro, the need for disclosures would be obviated, because Hiro would no longer have the ability to primarily or materially influence the value of the STX relative to others involved in the network. Hiro also would no longer have nonpublic insights into factors related to the STX or the network that should be communicated to token holders.

We therefore again engaged with the Staff to discuss our thoughts on the level of decentralization that we believed would be fulfilled based upon anticipated technical, operational, and economic changes to the network. Version 2 of the Stacks blockchain, released in January 2021, contained a wide variety of upgrades, including, in our view, fully decentralizing it such that Hiro could no longer control any subsequent changes to the network.[2]

Hiro provided notice to the Staff and token holders through filings that disclosed Hiro's plan to file the Form 1-Z "Exit Report" (to cease its Regulation A reporting obligations) six months after it determined that decentralization was achieved. Following the launch of the decentralized version of the network in January 2021 and several additional months of discussions, Hiro informed the Staff of our intent to file our Form 1-Z in July 2021.

Almost immediately, Hiro's engagement with the Staff stalled until, shortly thereafter, the SEC's Enforcement Division opened an investigation into Hiro related to 'potential securities violations'. In other words, our efforts to participate in a collaborative process appeared to send us down the path to a costly referral to enforcement.

At no time did the SEC articulate what supposed securities violations they were investigating, just wide ranging and scattered 'requests for information'. Hiro faithfully complied with all enforcement-related requests spanning a period of three years. We spent more than $2.5 million dollars in legal costs and countless hours responding. Each time the pattern was the same: the SEC would send a request, we would comply, and the Enforcement Division would go silent for months, until the next request. This pattern continued until the SEC's investigation was suddenly and unexpectedly closed on July 9, 2024. Hiro continued to meet its reporting obligations under Regulation A until the filing of our Exit Report on January 8, 2025, which we had delayed during the investigation out of caution (meaning that we also incurred ongoing reporting costs in the interim).

It is critical that any regime that requires regulatory approval or other action for distribution of digital assets provide a clear and realistic way to exit that regime. We continue to believe, consistent with prior statements by the SEC and its staff and our own experience building a blockchain network, that once a system is decentralized, an issuer should no longer appropriately be responsible for ongoing filings. However, the uncertain and broad boundaries of what constitutes "sufficient decentralization" (including as referenced under the SEC Staff's 2019 Framework for Digital Assets) materially constrained Hiro's ability to take actions to exit the Regulation A reporting regime with certainty.

---

[2] Muneeb Ali, *Stacks Cryptocurrency Expected To Reach Non-Security Status in the United States* (December 7, 2020), https://blog.blockstack.org/stacks-cryptocurrency-expected-to-reach-non-security-status-in-the-united-states. Relevant factors included owning less than 10-15% of the tokens, requiring token holder consent for changes (which could be proposed by anyone), integration of significant numbers of non-affiliated miners, and many others.

The process Hiro experienced was exceedingly costly to both Hiro and users, and it is unclear what the benefit has been to STX holders. Every substantial business decision required consulting with lawyers. More importantly, to avoid any or all implications that we could somehow control or materially influence the network, we have avoided activities we were concerned could be viewed as technical foot faults, such as providing STX as consideration in service provider contracts without twelve month holding periods. Each of these decisions has come at a cost to us and users – for example, by limiting liquidity of the assets – without any obvious upside. We have also foregone opportunities within the scope of our entrepreneurial enterprise best suited to our unique and critical subject matter expertise, in the fear that any potential influence over the development of the network at all would threaten the Staff and the SEC's view of our status.

I truly do not believe users or investors are well served by developers who effectively and fully renounce their project in the "name" of decentralization, which is what we believed we needed to do in light of our experience. Instead, we recommend focusing on parameters for decentralization that limit that misalignment between developers and users by allowing involvement of the developer of a network, as long as the developer cannot control operational or management decision making. I believe this is best met through a bright line definition of decentralization provided by Congress that is based on (a) the ownership of token supply across affiliates / related parties and (b) the technical control over the network.

It is also worth noting that there were collateral consequences to the lack of certainty related to other market participants: Even after our Regulation A token offering, it wasn't clear to third parties how they could permissibly engage with the Stacks token. For example, could it be listed on exchanges? Which party could list it on an exchange? Who could provide custody arrangements? These are all questions that we hoped would have finality post-offering following an extensive process; we would hope they would be answered by additional clarity on decentralization.

C. Congress should adopt rules to clarify that programmatic sales using exchanges by an issuer are not securities transactions

I also believe our company and the broader crypto market has been ill-served by the absence of a clear pathway to conduct token sales on exchange prior to network decentralization or maturity. Clarifying that pre-programmed sales of digital assets on exchanges in blind bid/ask transactions by an issuer are not securities transactions subject to SEC registration or qualification should be a priority. In many instances where Hiro's capital needs could have been met by periodic open market token sales, we were required to solicit venture capital investment or private placements

to investment firms, which was both more costly and less supportive of development of the network. A legal framework including this standard would have eased this considerably.

We understand that there can be a concern about issuers and their affiliates flooding the market with an unrestricted asset, which could harm existing holders. To avoid a scenario where large tranches of tokens are sold on the market by a development team using programmatic sales, a blended approach could be taken whereby tokens could only be sold through programmatic sales (a) after 12-24 months, to allow the market to assess their performance and ability to meet disclosure requirements, and (b) subject to annual caps, which could be based on a number of factors such as circulating supply, team supply, or prior annual expenditures.[3]

D. Congress should require the SEC to adopt appropriate and tailored requirements for the disclosures needed for digital asset offerings, which should evolve over the lifecycle of a project and not include audited financial statements

Congress should mandate that the SEC adopt clear requirements for disclosures in digital asset offerings, and those disclosures should not include audited financials. We have spent approximately $450,000 annually on external finance and legal costs related to audit obligations and semi-annual disclosures and an additional $500,000 as it relates to internal finance and legal personnel necessary to maintain our compliance as a reporting entity, representing upwards of 7% of our total annual expenses.

Were the audited financials simply a function of cost that provided tremendous benefits to investors, our calculus on the expense might be different. However, we have not found them to be an efficient use of our capital due to the lack of usefulness to crypto users and investors. We believe unaudited financials with a signed attestation as to their accuracy, should be sufficient.

The disclosures made pursuant to Regulation A are intended to provide investors with information about the enterprise. While the business may change, the focus on the enterprise is static. On the other hand, the development of a blockchain network shapeshifts. It begins with the developer, which *could* be an enterprise, or could be a single or set of entrepreneurs with a vision. Following inception, the core functions, ideation, and development move from one entity to meet other builders, hobbyists, companies, and tinkerers; much of what the blockchain network becomes with each passing year through developments and upgrades no longer rests within the originating enterprise.

With that difference in lens in mind, the utility of disclosures related to a single entity – the Regulation A filer – within a network of interconnected *but distinct* persons and organizations

[3] This approach would be consistent with the "dribble out" provisions under current Rule 144, which provides a safe harbor to secondary transactions for certain otherwise restricted securities.

diminishes. While the status of Hiro's internal corporate governance, financial and compliance structures continued to elevate through our expenditures related to disclosures and audited financials, it did not give users what they needed. Instead, users interacting with our products or the network consistently reached out for information or metrics relevant to their uses.

The feedback and commentary we receive from users is almost principally related to our developer tools and network metrics and functionalities. As a result, in lieu of audited financial statements, we believe investors would be better served by being provided the most pertinent details of a project to a crypto investor, like key persons to the project and their compensation arrangements, token holdings by the issuer and related parties, and disclosures of both anticipated and past token sales on a 15- or 30-day timeline, supplemented by blockchain-specific information such as a third-party security audit, key governance rights, information security practices, and procedures for multi-signature transactions, if applicable. At the beginning of a project, when a project's or the issuer's financials may be relevant to the project's long-term viability, financial statements may be relevant as well, but we do not believe subjecting them to audit is necessary in light of the cost, especially given that they will likely recede in relevance in many cases. Therefore, financials with an attestation from an accountant should be sufficient.

Given the differences in mechanisms across blockchain networks, it would be difficult to prescribe a universal set of elements that should be subject to review in third parties audits, and so we recommend a principles-based approach to the financial information that should be provided. **We do believe, though, that one unifying principle is that data within blockchain networks should be open and publicly verifiable by independent parties without need for supplementation by any development team**. This would capitalize on the unique transparency that blockchains provide in order to help address concerns about an issuer, project, or affiliates falsifying or misrepresenting any data or metrics in the same way a formal audit does for financial statements.

E. Congress should protect the right for developers to contribute open-source software without attribution of liability for third party use

Finally, Congress should mandate protections for developers to contribute to open-source software deployed in permissionless blockchain protocols. Collaboration and open experimentation have been at the heart of almost all scientific progress, especially technological ones like the Internet. Builders fearing they will be subject to personal civil or criminal liability for the actions of others they have no control over, using code they contributed to a public good, will have a chilling effect on long term progress. In order to ensure the progress of this industry in the U.S., developers need assurances that the use of their software contributions by third parties will not result in legal liability.

IV. A Look Ahead

Our effort towards regulatory compliance has been no small endeavor for an early-stage, 40-person company. While we have been disappointed by the opportunity for the U.S. regulatory regime to lead in this arena that is lost to time, we are incredibly encouraged by the work of the SEC in 2025 as evidenced by, for example, the creation and engagement of the Crypto Task Force and Staff Statements by the Division of Corporation Finance. If the SEC is focused on marshalling its resources towards transparent communication and industry engagement, and Congress mandates and supports that effort, I think we will see a markedly stronger digital asset industry emerge as a result. Whether the SEC adopts a framework similar to the Token Safe Harbor 2.0 or defers creation of new registered offerings for digital assets to await Congressional market legislation amendments, we believe our experience should be instructive on the limitations of qualification and registration regimes in their current forms as a means for token offerings.

Hiro is built for developers by developers. We proudly believe in the power of free markets and blockchain technology to unleash the creativity of millions. As a civilization, we have hundreds of years of history to show how important predictability and certainty is to entrepreneurs, and just because a technology is new, does not mean these needs are any different. To fulfill the vision, builders need regulatory clarity and fit-for-purpose, cost-effective structures to provide meaningful disclosures to investors, so that builders can move quickly and with confidence in doing what they do best: building.

Thank you to both Subcommittees for your focus on charting a new path for digital assets in the U.S.