



SEC Proposal Could Impact Crypto/DeFi

While the proposed rule makes no mention of blockchain or digital assets, observers see a path for the SEC to extend its reach.



Starting in the late 1990s, unprecedented advancements in technology and innovation have transformed nearly every stage in the securities trading lifecycle. From displaying quotations to order execution to trade processing, these advances have created new efficiencies (and challenges) for trading in nearly all asset classes. The Securities and Exchange Commission (SEC) has largely kept pace with these changes. For example, Regulation ATS was adopted in 1998 to govern off-exchange block trading on so-called “dark pools,” and Regulation NMS was adopted in 2005 to set new trading standards for the new “National Market System” created by a spate of new stock exchanges competing for liquidity. Other regulations, such as Regulation SCI, have helped enforce technological integrity standards on key market participants, including exchanges and some Alternative Trading Systems, or ATSs. Until recently, dealers in government securities have benefited from technological advances but have been somewhat insulated from the burden of these new regulations. A new SEC rule proposal, however, could change that by increasing regulation in government securities trading, and perhaps incongruously, increasing regulation of trading in crypto assets.

On January 26, 2022, the SEC published a proposed rule (the “Proposal”) to modify the definition of “exchange” to include any “Communication Protocol System.” The stated purpose of this proposed modification is to align the regulatory environment for government securities trading with that of equity securities by expanding the definition of “exchange” to include a new class of regulated trading platform, the Communication Protocol System—which, while not defined, generally refers to software used by many dealers of government securities for execution and price discovery. What this proposed expansion of exchange may also do is require certain

crypto trading platforms, e.g., decentralized exchanges, to register with the SEC and adopt compliance and governance programs similar to that of an exchange or an ATS.

We will first cover the Proposal’s impact on government securities trading and then explain the potential impact on trading of crypto assets.

An Overview Government Securities Trading

In the interdealer market, most trading of on-the-run U.S. Treasury Securities occurs on Alternative Trading Systems (ATSs) using central limit order books supported by advanced electronic trading technology. Trading of on-the-run U.S. Treasury Securities is generally concentrated within a very small number of ATSs. For off-the-run U.S. Treasury Securities, the market is quite different. While some interdealer off-the-run transactions occur on ATSs, most off-the-run transactions occur via bilateral agreements reached through traditional voice assisted brokers and electronic trading platforms that offer trading protocols to bring together buyers and sellers.

Government securities dealers routinely employ certain software programs for purposes of price discovery and to agree upon a transaction price. These software programs perform marketplace functions arguably similar to those of exchanges and ATSs and have become part of the trade lifecycle for many dealers in government securities. This type of trading software, what the Proposal calls a Communication Protocol System, would be subject to regulation as an exchange if the Proposal is adopted.

What is an Exchange?

Under the current Exchange Act Rule 3b-16, the current definition of “exchange” is a system or facility that has two characteristics:

- (i) it brings together orders of multiple buyers and sellers of securities and
- (ii) trading takes place according to established, non-discretionary rules or procedures.

The Proposal would modify the definition of “exchange” to include any “Communication Protocol System” that does both of the following:

- (i) brings together buyers and sellers of securities using trading interest; and
- (ii) makes available established, non-discretionary methods (whether by providing a trading facility or Communication Protocols, or by setting rules) under which buyers and sellers can interact and agree to the terms of a trade.

This approach would allow the SEC to define as an exchange virtually any software widget or API that facilitates trading in securities. The Proposal leaves undisturbed existing Commission rules that make it possible for a platform meeting the definition of exchange to register as an ATS instead. Under the Proposal, a Communication Protocol System would also have the option of registering as an ATS, but it would be required to register as one or the other.

Significantly, the Proposal introduces the term “Communication Protocol System” without defining it. The closest the Commission comes to a definition is when a Communication Protocol System is characterized as using “various technologies and connectivity, generally offer[ing] the use of non-firm trading interest and establish[ing] protocols to prompt and guide buyers and sellers to communicate, negotiate, and agree to the terms of the trade without relying solely on the use of orders.” Rather than defining formally, the Proposal focuses on the hallmarks of it and indicates that a system bearing such hallmarks would “make securities available for trading” and would thus fall under the revised definition of an exchange. Of course, should the Proposal be implemented, the Commission may decide to provide clarification by writing a definition for Communication Protocol System, or the Commission could aim for maximum interpretive and enforcement flexibility and simply rely on the examples and characteristics of a Communication Protocol System described in the proposing release.



RFQs are software that allow market participants to obtain quotes from multiple market participants on either a disclosed or anonymous basis. Market participants provide the system with information on type of security, side and size and may specify that the interest is valid for a certain window of time to agree to an execution. An RFQ system could also include a request for execution on multiple securities, referred to as an “RFQ list,” which creates an “all or none” scenario whereby the counterparty can accept execution only for all securities on the list.



“Axes” are software that displays streams to market participants consisting of either firm or non-firm orders (“indications of interest” or “IOIs”) on either a disclosed or anonymous basis. Typically, trading interest is firm for market participants with existing relationships; and for market participants without an existing relationship, the trading interest tends to be the starting point for negotiations.



Conditional order systems collect information from market participants on security type, size, price and side of transaction. Similar to Axes and RFQs, trading interest can be firm or non-firm and if there is a match of non-firm interest, the system will invite buyer and seller to exchange messages to conclude the transaction.



Negotiation systems are software that provide venues for buyers and sellers to see “displayed non-firm trading interest, access liquidity, find a counterparty, and negotiate a trade through the use of their communication technology.” They are different from other Communication Protocol Systems in that they are focused more on encouraging communication between market participants in securities in which they may have trading interest and the order can be completed outside the system. This type of system can also scrape the order management systems of market participants and suggest potential matches.

Key Terms: “Trading Interest” “Bring Together” and “Non-discretionary methods”

As outlined above, the Proposal, if adopted, would require a Communication Protocol System to be registered as an ATS or exchange if it meets a two-pronged test of (i) bringing together buyers and sellers of securities using “trading interest,” and (ii) making available “non-discretionary methods” for buyers and sellers to interact and agree to a trade. The following will address the significance of how the Commission defines certain key terms and the impact on breadth of application.

One such key term is “trading interest,” which the Proposal would expand to include not only “orders” but also “any non-firm indication of a willingness to buy or sell a security that identifies at least the security and either quantity, direction (buy or sell), or price.” The Proposal explains that “the security and either the quantity, direction, or price would provide sufficient information to bring together buyers and sellers.” As if this definition were not broad enough, the Proposal goes on to provide that even if a market participant uses a system to message *only the symbol*, the system would still qualify as collecting trading interest if it allowed a responding participant to submit a message.

A second key term is “bring together.” The proposal clarifies that the Regulation ATS definition of “bring together” would not be altered; thus, here, “bring together” would continue to describe when a system that “displays, or otherwise represents, trading interests entered on the system to system users.”

The final key revisions relate to the trading protocols established by the Communication Protocol System. The Proposal revises the prior requirement that an exchange must “use established, non-discretionary rules” for trading by replacing “use” with “make available” and by clarifying the meaning of “established non-discretionary rules.” The impact of replacing “use” with “make available” broadens application. For example, Company A provides a quotation service for indications of interest and when a match is found it is referred to Company B for execution. Company B is surely “using” established, non-discretionary methods to execute its trade, but Company A is simply referring a potential match and is not “using” any rules to execute a trade. Under the revised definition, Company A would be considered an exchange because it “makes available,” via partnership with Company B, “established, non-discretionary” trading methods.

As to the phrase “established, non-discretionary rules,” the Commission clarifies that the discretion refers not to discretion by market participants, but by the platform itself. In other words, a platform that provides market participants a great deal of discretion when deciding to execute an order would still be applying “established, non-discretionary rules” even if the platform itself has no discretion as to whether to allow for execution of the order.

Potential Impact on Crypto and DeFi

While the proposal ostensibly aims to expand the SEC’s remit to networks facilitating trading in traditional securities markets, the revised “exchange” definition also has the potential to capture a variety of platforms in the decentralized finance (DeFi) space, insofar as such platforms are used by buyers and sellers to transact in securities.¹

While the Proposal did not include any references to crypto, blockchain, DeFi, or distributed ledger technology, the potential application of Regulation ATS and other securities regulations to DeFi platforms raises a number of legal and practical questions about how these regulations might be enforced and who precisely would be responsible for complying with registration, reporting, and other relevant requirements.

Among the various types of DeFi projects that might be impacted should the final rule be adopted as proposed, Automated Market Makers (AMMs) are perhaps the most likely to be tested in the near term. An AMM is the protocol that enables a decentralized exchange (DEX) to function without a central intermediary. These markets facilitate billions of dollars in daily trading volumes and play a critical role in maintaining liquidity in the decentralized financial system. Whereas a centralized exchange matches buyers and sellers based on the orders they submit and relies on an order book to determine prices, a DEX, via the AMM, relies on smart contracts to facilitate transactions between buyers (or sellers) and liquidity pools, with prices determined based on a mathematical formula² built into the contract code. A liquidity pool comprises collections of tokens (typically in pairs in some fixed ratio) deposited into a contract by liquidity providers; the contract then acts as a guaranteed counterparty to any trader without the need to locate a matching order on the other side of the market. Anyone is able to establish or contribute to a liquidity pool, and so-called liquidity providers do so with the aim of eventually withdrawing the contributed funds along with a share of the trading fees, which are typically proportionate to one’s contribution to the pool.

It remains unclear how the SEC might enforce the Proposal in the DeFi space. Certainly, to the extent it matches trades in *securities* (setting aside unresolved issues surrounding which crypto asset products meet that definition), a DEX or AMM protocol might constitute a Communication Protocol System and therefore meet the proposed expanded definition of “exchange.” But a core facet of decentralized finance, and the broader cryptocurrency/digital assets space, is that of *decentralization*—the notion that there exists no central authority to exert control over a network and thus no single point of failure or corruption. Many DEXs are decentralized autonomous organizations (DAOs) or decentralized applications (DApps) and do not have employees in any ordinary sense; rather, they are either community governed or operate automatically, propelled by smart contracts living indefinitely in the blockchain, in many cases with little or no involvement from the initial development team. Moreover, their token holders, users, and liquidity providers can span the globe and range from ordinary individuals to more sophisticated and well-funded operations, all transacting pseudonymously behind their public wallet addresses. This reality makes it nearly impossible to identify any particular group or individual who might even be capable of shepherding such a project through licensing and registration processes or establishing the compliance, reporting, and other systems required of broker-dealers, ATSS, and other regulated firms.

For these same reasons, it is also exceedingly difficult for regulators to enjoin the continued operation of or extract fines or penalties from “noncompliant” platforms, as there would be no clear entity or individual against which or whom to bring an enforcement action and no viable technical solution to permanently suspend transactions on a decentralized network.

Therefore, while the changes to the definition of “exchange” proposed in the recent release might capture some players in the DeFi space, administering these changes could prove difficult, costly, and time-consuming.

Key Takeaways

An SEC rule proposed quietly in January will expand the definition of an exchange, to include “Communication Protocol Systems.” This new definition of exchange can be expressed in the broadest terms possible as a system that:

(i) provides the capability for a market participant to send a message indicating a potential interest in trading any security plus, virtually any other market-relevant information, such as quantity, size or direction.

(ii) allows another market participant to accept or interact with the message, and

(iii) As a system that provides, itself or via partnership, a way to direct the execution of an order.

If adopted, the Proposal would bring additional regulatory challenges to government securities dealers and could provide the SEC with authority to regulate some participants in DeFi and crypto.

¹ The pricing mechanism varies by DEX, but a common formula used across many is $a*b=c$, where a is the total value of all Token A, b is the total value of all Token B, and c is a constant value specified when the trading pair is established. Thus, when a trader swaps (i.e., trades) A for B—increasing the amount of A in the pool and decreasing the amount of B—the value of A relative to B must necessarily decrease to maintain the constant c in the pricing formula. Where token prices on a DEX diverge from prices on other DEXs and centralized exchanges (e.g., if A becomes materially more or less expensive relative to other marketplaces), the ecosystem relies on arbitrageurs to bring prices in line with the broader market (e.g., by buying A in cheaper markets and selling it in more expensive markets and vice versa).

² The question of which tokens constitute securities remains a matter of debate and, for a variety of reasons, is unlikely to be settled definitively in the near future.

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