

Davis Polk Blockchain Bulletin: A Cryptocurrency and DLT Newsletter

By [THE DAVIS POLK CRYPTO TEAM](#) on March 20, 2018

POSTED IN [CFTC](#), [FINTECH](#), [SEC](#)

We are pleased to publish this first Blockchain Bulletin, which we expect to be the first in a series of periodic posts covering developments in cryptocurrency and DLT. The newsletter is meant to provide a thematic—and non-technical—treatment of developments in these areas that we find of particular interest. The newsletter’s focus will mainly be on legal and regulatory developments, but we may also discuss technologies and market developments that we believe could shape this landscape. We hope you enjoy this first edition of the newsletter.

Market Developments

Token Curated Registries and SEC Compliant ICO Platforms

On March 7, 2018, the SEC issued a [statement](#) suggesting that at least some online platforms for digital asset trading are operating unlawful securities exchanges. The warning should not be a surprise given (1) SEC Chairman Clayton’s numerous public statements that he believes that nearly all tokens he has seen offered and sold in initial coin offerings (**ICOs**) are likely securities and (2) that many online platforms continue to list these types of tokens. To the extent trading platforms list assets that are deemed “securities,” the platforms must either register with the SEC as a national securities exchange or meet an exemption (for example, as an alternative trading system, for which SEC registration is also required).

The SEC’s focus on exchange and intermediary regulation will have profound implications for many online platforms for digital asset trading and market intermediaries facilitating those transactions. Some exchanges and intermediaries may seek to limit the assets they choose to list and trade to those that are not, or are unlikely to be deemed, securities. There seems, for example, to be widespread acceptance in the marketplace that some digital tokens, such as Bitcoin, Litecoin

and Bitcoin Cash, more closely resemble currency-like commodities than securities (although the SEC has not formally expressed its view on this point).

Other market participants are seizing this as an opportunity for further innovation and are racing to bring to market new “ICO 2.0”-style platforms and related technologies designed to help issuers and intermediaries address the securities law requirements that apply to security tokens.

Harbor and the R-Token Standard. One example involves using smart contracts to embed compliance obligation “logic” within a token itself, rather than relying on external policing and enforcement (e.g., by trading platforms). For example, Harbor recently released the open-source [Regulated Token \(“R-Token”\) Standard](#), which essentially layers compliance logic on top of a standard ERC-20 token (i.e., a token built on Ethereum), which is the most commonly used technology for ICO token design and development. Using smart contracts, the R-Token Standard could allow a digital token to be self-regulating in some respects—for example, by enforcing AML/KYC restrictions, holding periods and other transfer restrictions. Attempted transfers that fail these tests would be automatically rejected by the network.

Token Curated Registries. A second development involves the creation of “[token-curated registries](#)” (“TCRs”) to establish a self-regulatory body. Unlike the U.S. securities and derivatives SROs, FINRA and the NFA, which are authorized by statute and deputized by the SEC and CFTC (respectively) to create rules and impose sanctions for violations of those rules on its member firms, TCRs do not derive their authority from statute or government agency. Rather, TCRs operate as a cooperative, where members in the registry vote to include new participants, set standards, and share in the costs and rewards of running the registry, and membership in the registry has a signaling effect to the public. For example, membership may convey a certain commitment to transparency and compliance with existing legal requirements.

Some proponents of this model have created [Messari](#), a venture-backed platform (e.g., Galaxy Digital, Blockchain Capital) that they hope will become an open-source EDGAR-type database for digital assets. The model works as follows: a developer or company behind a digital asset would pay to submit an ICO token to the Messari registry, and a self-regulatory body called the [ICO Governance Foundation](#) (“IGF”) would provide and maintain an “voluntary public filing and registration protocol

called Form IGF-1 as well as a public registration database, which performs collection, validation, indexing, acceptance, and forwarding of submissions.” IGF would work with national regulatory agencies to establish global best practices and standards for ICOs. The goal is that listing on Messari would not only signal to investors compliance with those best practices and standards, but would also allow investors to easily ascertain basic economic information about a given token through the Form IGF-1.

The Virtual Commodity Association. [Gemini](#), a licensed digital asset exchange and custodian founded by the Winklevoss twins, published a [proposal](#) on March 13, 2018 to form the “Virtual Commodity Association”—an SRO to regulate activities involving virtual commodities, like Bitcoin. According to the proposal, the VCA will be a non-profit independent organization that does not operate any markets, will not be a trade association, and will not provide regulatory programs for security tokens or security token platforms. Initially, membership would be limited to exchanges and OTC dealers in virtual commodities. Members of the VCA will have to certify compliance annually to particular “sound practices.” A board of directors, selected from the membership, would have authority to impose sanctions for violations of those sound practices.

While these initiatives are welcome steps to bring the trading of digital assets into closer alignment with regulations governing financial markets, by themselves these initiatives are unlikely to address all legal and regulatory implications stemming from a token being a security.

Key Takeaways

- Some digital asset developers and entrepreneurs are heeding the call for greater self-regulation in this emerging industry.
- Two technological developments—the R-Token Standard and TCRs—are examples of the more advanced projects that are gaining support in the market.
- Other SRO structures may also continue to emerge, as highlighted by Gemini’s recent VCA proposal.
- Uncertainty concerning the regulatory compliance of secondary market trading in tokens remains.

Venezuela's "Petro" and National Cryptocurrencies

On February 20, 2018, the government of Venezuela began a presale of the "Petro," a purported national cryptocurrency. The presale was to last until March 19, and—according to the Venezuelan government—raised over \$735 million in the first 24 hours. The Petro's stated purpose is to serve as the first national or sovereign cryptocurrency, meant to supplement the plummeting Venezuelan bolivar, and it is allegedly backed by Venezuela's significant oil and mineral reserves. In reaction to serious concerns raised by the Petro, President Trump issued, on March 19, an [executive order](#) banning transactions in the Petro and any related financing or dealings in the cryptocurrency by U.S. persons or from within the United States.

Venezuela plans to issue 100 million Petro tokens in total, valued at more than \$6 billion. It has established VIBE, a governmental cryptocurrency advisory group, and appointed minister Carlos Vargas as "Superintendent of Cryptocurrencies." According to a [whitepaper](#) released by the Venezuelan government, the Petro is a "sovereign crypto asset backed by oil," such that its value will be set by the international market price for a barrel of crude oil. Venezuelan President Nicolas Maduro claims that the Venezuelan government will accept Petro tokens as payment for taxes, and has promised that the government will "set up cryptocurrency mining farms in every state and municipality in the country." It is as-of-yet [unclear](#) whether the Petro will be on the Ethereum or NEM blockchain, or on a separate proprietary Venezuelan blockchain.

Despite the novelty of the Petro as the first state-issued cryptocurrency, it suffers from some fundamental problems.

First, as [several commentators](#) have [pointed out](#), the Petro does not, in fact, appear to be backed by Venezuelan oil reserves—or by any other real asset. Despite [early reports](#) that the Petro would "consist of a purchase agreement for one barrel of oil per token," the only connection that the tokens currently seem to have with oil is a promise by the Venezuelan government to accept tax payments in Petro at a government-determined exchange rate linked to oil prices.

The Petro issuance also has been seen as an attempt by the embattled administration led by President Maduro to circumvent local and international law. The Venezuelan National Assembly has declared the sale of Petro tokens to

be an illegal debt issuance. And the U.S. Department of the Treasury has agreed with that conclusion, warning potential investors in the Petro that participation in the Petro ICO could violate U.S. sanctions by illegally extending credit to the Venezuelan government.

As the Brookings Institute discussed in a [recent article](#), these two aspects of the Petro issuance pose significant respective risks not just to investors in the Petro, but also for the global cryptocurrency markets as a whole. First, if the Petro turns out to be worthless, as many analysts predict, this could further the notion that digital assets are merely a scam or a speculative bubble. As Brookings explains, the Petro issuance “provides no real service for its international holders,” and “[a]lthough Venezuela was able to raise money in its pre-sale, speculators will quickly find the petro has no long-term value. Such realization and its aftermath may unfortunately contribute to the idea that cryptocurrencies facilitate fraud.”

On the other hand, if the Petro turns out to be an effective fundraising device for the Venezuelan government, it could spur other nationals who are subject to sanctions—either by the U.S. or other governments—to follow a similar path. Indeed, there is some indication that this is already beginning to happen. In [Iran](#), after a meeting with the state-owned Post Bank of Iran, the head of that nation’s Ministry of Information and Communications Technology tweeted that Iran is in the process of developing a “cloud-based digital currency” for submission to the Iranian banking system. The deputy chair of Turkey’s Nationalist Movement party, Ahmet Kenan Tanrikulu, recently drafted a proposal to create a state-backed cryptocurrency called “[Turkcoin](#),” which would tokenize asset-backed securities from the Turkish government. And in Russia, officials from the Venezuelan government discussed the Petro in a [meeting](#) between the two nations’ finance officials, following a purported directive from Vladimir Putin to develop an in-house Russian currency, the “[cryptorouble](#).”

Key Takeaways:

- Venezuela’s ongoing ICO for its “Petro” token serves as the first example of a national cryptocurrency.

- Despite claims that the Petro is backed by Venezuela’s natural resources, there is little in place to guarantee investors that the tokens will have enduring value.
- Because the ICO may essentially be a debt issuance on behalf of the Venezuelan government, participation in the ICO may violate U.S. and other international sanctions against Venezuela.
- In light of the unstable nature of the Petro, and concerns about sanctions and money laundering, the Petro issuance poses a threat to the broader cryptocurrency market, insofar as it may further the impression that other token sales or ICOs are fraudulent or that it might serve as a means to circumvent international sanctions.

SWIFT Claims “Huge” Progress on DLT Bank Pilot

On March 8, 2018, SWIFT published the long-awaited [results](#) of its distributed ledger proof-of-concept project. The project, which launched in January 2017, aims to help banks overcome significant challenges in monitoring and managing their international [nostro accounts](#)—accounts held by banks at other banks.

Nostro Accounts and the Proof-of-Concept Project. As [SWIFT describes it](#), banks hold various currencies in nostro accounts all over the world to facilitate cross-border payments. Currently, banks cannot monitor their account positions in real time due to the lack of intraday reporting coverage. As a result, banks often hold more currency in their nostro accounts than is necessary, which ties up capital that would otherwise be deployed elsewhere. The goal for the proof of concept project was to determine whether DLT and smart contract technology would be effective in allowing banks to reconcile their account positions in real time. As the Damien Vanderveken (Head of R&D, SWIFT) put it, “If banks could manage their nostro account liquidity in real time, it would allow them to accurately gauge how much money is required in each account at any given point, ultimately enabling them to free up significant funds for other investments.”

The Technology and Its Mixed Results. The project used [Hyperledger Fabric 1.0 technology](#) (see a list of Hyperledger [members](#)) and had 34 participating banks operate their own nodes on a private permissioned blockchain in a closed environment (the SWIFT DLT sandbox). The results seem mixed. The project

confirmed that DLT can (1) deliver the business functionalities and data richness required to support automated real-time liquidity monitoring and reconciliation; (2) enable real-time event handling, transaction status updates, full audit trails, identification of pending entries; and (3) generate the data required to support regulatory reporting.

However, the project also concluded that the industry and the technology face challenges to DLT serving as a critical global financial infrastructure. For example, on the industry side, account servicers would need to first migrate from batch to real-time liquidity reporting and processing, and back office applications would need to be upgraded to feed the platform with real-time updates. On the technology side, the project results showed that Hyperledger Fabric 1.0 requires some elementary enhancements, such as tooling that allows for basic management functions like adding a node to a channel.

Key Takeaways

- The results of SWIFT’s DLT Bank Pilot show that DLT could deliver the functionalities to support automated real-time liquidity monitoring and reconciliation.
- However, SWIFT is far from ready to employ DLT as the base for a global financial infrastructure.

Regulatory Developments

SEC, FinCEN, and CFTC Actions Continue to Paint a Fragmented Regulatory Landscape for Digital Tokens

This piece originally appeared on the Davis Polk FinReg Blog on March 8, 2018.

The past couple weeks have seen several interesting developments in the law and regulation of digital tokens. Each action reflects an intense focus by U.S. regulators to clarify the treatment of digital tokens, from those issued by startups in ICOs to the more “traditional” cryptocurrencies such as Bitcoin and Litecoin, as well as the regulatory status under U.S. law of persons engaging in certain activities involving digital tokens. These actions are merely the latest—and most certainly not the

last—efforts by regulators and courts to address the many policy, legal, and regulatory issues raised by digital tokens. The picture emerging from these efforts is one of a fragmented, overlapping, and complex regulatory landscape for digital tokens.

SEC Flags Regulation of Digital Token Intermediaries. On March 7, 2018, the SEC Divisions of Enforcement and Trading and Markets released a joint statement that cautions investors who transact on unregulated digital token exchanges and included expanded warnings about the potential registration obligations of digital asset intermediaries—including exchanges, wallet providers and others.

This iteration of the SEC’s warnings concerning digital assets focuses on digital token transactions conducted through, and the activities of, online trading platforms and other intermediaries. The statement describes the risks to investors trading on platforms that are not registered with the SEC and, thus, are not subject to SEC oversight of their listing standards, order execution protocols, customer access standards, or market data integrity.

The statement also provides explicit warnings to intermediaries about the extensive securities regulatory framework that applies to exchange, storage and other activities involving digital tokens that are securities—moving beyond the securities registration requirements that have been the primary focus of the SEC’s ICO enforcement activity until now. The Divisions warn that trading platforms may be subject to registration as national securities exchanges (or as alternative trading systems, if the platform qualifies for that exemption), while wallet providers and other service providers may be subject to registration and regulation as broker-dealers, transfer agents, or clearing agencies. Each of these registration and regulatory categories entails extensive compliance obligations and may be implicated where the tokens involved are deemed securities, depending on the particular services being provided.

The statement reiterates the SEC’s view that digital token market participants should consult legal counsel to determine the applicability of these requirements to their activities and suggests that the SEC staff may be willing to discuss these regulatory considerations with market participants who are seeking to navigate the SEC’s regulations.

FinCEN on ICO Participants as MSBs. The Financial Crimes Enforcement Network (**FinCEN**), a bureau of the U.S. Department of the Treasury, has, since **at least 2013**, expressly applied its money services business (**MSB**) licensing regime to activities involving the exchange, transmission, and administration of virtual currencies. A letter from FinCEN staff that was made public on March 6, 2018 has garnered much attention for its focus on the application of the MSB licensing regime to participants in ICOs. The letter was addressed to Senator Ron Wyden, the ranking member of the Senate Committee on Finance, in response to his December 14, 2017 letter to FinCEN requesting information on the oversight and enforcement capabilities of FinCEN over virtual currency financial activities. FinCEN has not itself yet publicly released the letter, and it is not clear whether it is intended to convey public guidance.

The letter has raised questions about which types of ICO tokens and activities would be viewed by FinCEN as triggering MSB licensing requirements. For example, the letter itself does not undertake to distinguish among the many types of digital tokens—which range from those that are explicitly designed to represent securities (**security tokens**), to those structured to provide holders with access to or use of a network or product (**utility tokens**), to those that are designed to, or do, function as a medium of exchange or store of value or have other currency-like functions (**cryptocurrencies**).

A closer read, however, leads us to believe that the letter is not intended as a new pronouncement on the reach of the MSB licensing regime, but rather a reiteration of **FinCEN's 2013 guidance**, in the context of ICOs. The 2013 guidance states that a person involved in administering, exchanging, or transmitting a virtual currency, including a “convertible virtual currency,” may be subject to MSB licensing on the basis that those virtual currencies function as currency, even if not backed by a government. The guidance describes a virtual currency as “a medium of exchange that operates like a currency in some environments, but does not have all the attributes of real currency,” and a convertible virtual currency as a virtual currency with either “an equivalent value in real currency,” or that “acts as a substitute for real currency.”

While the letter discusses FinCEN's approach to ICOs, when describing FinCEN's MSB registration regime, the letter focuses on examples involving currency, virtual currency and convertible virtual currency. For example, the letter states that “a

developer that sells convertible virtual currency, including in the form of ICO coins or tokens, in exchange for another type of value that substitutes for currency” as well as “an exchange [that] sells ICO coins or tokens, or exchanges them for other virtual currency, fiat currency, or other value that substitutes for currency,” would each be required to register as an MSB. The proposition that ICO issuers and intermediaries involved in digital token activities would need to evaluate whether they are administering, exchange or transmitting virtual currencies or convertible virtual currencies is not new; this concept instead seems firmly grounded in the 2013 guidance.

There are, however, puzzling aspects of, and core questions raised by, the letter. For example, the letter cites to the SEC’s regulation of broker-dealers and the CFTC’s regulation of “merchants and brokers in commodities” in noting that certain ICO offerings may be subject to regulation by the SEC or CFTC. It is not clear why the types of activities described in the letter—particularly where they involve the sale of virtual currencies and convertible virtual currencies by the developer—would themselves trigger SEC broker-dealer regulation or CFTC regulation over futures or swap brokerage activities, which apply to intermediaries, rather than developers. In addition, FinCEN seems to assume that ICO developers would be “administrators” for purposes of the MSB licensing regime. However, as has been recognized by [commenters](#), there may be circumstances in which an ICO developer is more appropriately viewed as not engaged “as a business in issuing (putting into circulation) a virtual currency, and who has the authority to redeem (to withdraw from circulation) such virtual currency.” At the very least, the letter recognizes that multiple regulatory regimes may apply to ICOs.

Virtual Currencies as Commodities. The CFTC has through guidance and enforcement actions consistently asserted that digital tokens (virtual currencies in CFTC parlance) are commodities and, therefore, subject to CFTC anti-fraud and anti-manipulation regulation.¹ Renowned jurist Judge Jack Weinstein of the U.S. District Court for the Eastern District of New York agrees.

¹ Security tokens, even though technically commodities, would instead be subject to the exclusive jurisdiction of the SEC.

The case, *CFTC vs. Patrick K. McDonnell and CabbageTech, Corp. d/b/a Coin Drop Markets*, concerned allegations of fraud involving Bitcoin and Litecoin brought by the CFTC against a *pro se* defendant. The court's order is interesting for a few reasons. First, it is the first pronouncement by a court that virtual currencies—including those on which no futures contract is currently offered—are commodities. The order also concisely describes the overlapping jurisdiction of several federal regulators, including the CFTC, SEC, Treasury Department, DOJ, and IRS, over virtual currency activities. The court notes, however, that regulators view their jurisdiction as incomplete but that “Congress has yet to authorize a system to regulate virtual currency.” This sentiment perhaps foreshadows efforts that may come from Congress to consider a more comprehensive regulatory regime for digital tokens and participants in digital token markets.