



The Legal 500 & The In-House Lawyer  
Comparative Legal Guide  
United States: Blockchain

This country-specific Q&A provides an overview of the legal framework and key issues surrounding blockchain law in the United States.

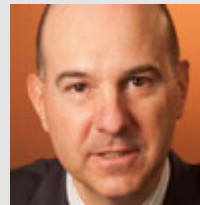
This Q&A is part of the global guide to Blockchain.

For a full list of jurisdictional Q&As visit <http://www.inhouselawyer.co.uk/index.php/practice-areas/blockchain/>



**Country Author: Cravath, Swaine & Moore LLP**

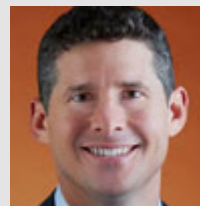
The Legal 500



**David J. Kappos, Partner,  
Corporate**

[dkappos@cravath.com](mailto:dkappos@cravath.com)

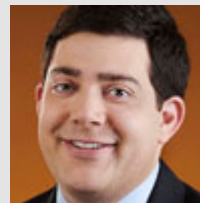
The Legal 500



**D. Scott Bennett, Partner,  
Corporate**

[sbennett@cravath.com](mailto:sbennett@cravath.com)

The Legal 500



**Michael E. Mariani, Partner,  
Corporate**

[mmariani@cravath.com](mailto:mmariani@cravath.com)

The Legal 500

**1. Please provide a high-level overview of the blockchain market in your jurisdiction. In what business or public sectors are you seeing blockchain or other distributed ledger technologies being adopted? What are the key applications of these technologies in your jurisdiction, and what is the state of development of the market?**

In the United States of America (“US”), Bitcoin is the poster child application of blockchain. Cryptocurrencies generate much of the blockchain-related news in the US, including, amongst others, Ether and more recently, Facebook’s announcement of the Libra stablecoin. Cryptocurrency is so commonplace in the US that certain states have acted to legalize cryptocurrencies as a payment option for paying state taxes. Despite the focus on cryptocurrency, the application of blockchain in the US goes well beyond this and involves a wide cross section of industries in both the private and public sector. On the public front, federal agencies, such as the Food and Drug Administration, the Department of Health and Human Services, the Department of the Treasury and the Department of Defense, have launched various blockchain-based initiatives, which are currently at various states of maturity ranging from proof of concept through pilot all the way to production. One such initiative has been from the Food and Drug Administration in recruiting an expert, Frank Yiannas, in traceability technologies in global food supply chains; Mr. Yiannas is working with the Food and Drug Administration to incorporate blockchain technology to further strengthen the U.S. Food Supply. In the private sector, blockchain is still in its infancy stage but we are seeing attempts to incorporate blockchain applications into various facets of a companies’ operations, from supply chain management and tracking, to making payments through the core corporate governance of a company, and to the extent that companies such as IBM and Microsoft are now starting to offer services that customers can use to build or integrate their own secure blockchain networks. States also have shown an interest in the integration of blockchain by companies. Delaware expressly authorized companies to use blockchain to track corporate shares to help clarify property rights, to automate cap tables and corporate actions such as dividend issuance, to provide transparent and accurate proxy voting and to provide self-executing certificates of good standing. However, the initial enthusiasm has slowed and there is still a search of where blockchain outside of cryptocurrency can find its application.

**2. Have there been any notable success stories or failures of applications of these technologies in your jurisdiction?**

The DAO hack is an iconic illustration in the US of both technical and regulatory shortcomings possibly attached with a blockchain application. The DAO, a digital decentralized autonomous organization, created a form of investor-directed venture capital fund, which allowed for the purchase of digital tokens during initial coin offerings (“ICOs”) as well as secondary trading. Due to vulnerabilities in the DAO smart contract, in June 2016, a DOA vulnerability was exploited by hackers, which almost led to the loss of 3.6 million Ether, which was valued around \$50 million USD (approximating one-third of the fund). This was avoided by implementing a “hard fork”, overwriting the Ethereum blockchain network to restore stolen ethers. In addition, the US Securities and Exchange Commission (“SEC”) intervened, confirming that an unregistered, non-exempted ICO could constitute a securities offering in violation of federal securities laws. The fund ultimately shut down but illustrates both legal and technical difficulties tied to blockchain technologies.

Despite the “risks” attached with blockchain, the US’s appetite for such technologies remains strong. In 2019, Deloitte’s survey reported a 61% positive response that blockchain technology is broadly scalable and will eventually achieve mainstream adoption. The market is still interested and optimistic as shown recently with the attempt of a crypto-dividend for Overstock. However, it is still too early to fully measure the impact of the current application attempts.

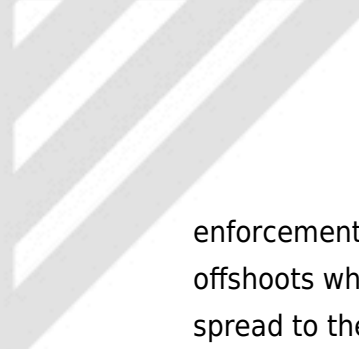
**3. Please outline the principal legislation and the regulators most relevant to the use of blockchain technologies in your jurisdiction. In particular, is there any blockchain-specific legislation or are there any blockchain-specific regulatory frameworks in your jurisdiction, either now or envisaged in the short or mid-term?**



Blockchain is not unheard of at the state or federal level in the US despite the minimal to non-existent formal rulemaking, but there is no comprehensive set of legislation to govern such technologies. There is a general acknowledgment that blockchain technology is an important part of the US's objective to remain at the forefront of innovation; however, similar to the reach of the technology, the legal questions remain widespread and ill-defined. The concerns are both industry-specific and application-specific, thus affecting a broad spectrum of the legal framework, ranging from tax law, securities law, intellectual property law, consumer protection/data privacy law, sales and banking regulations, advertising law as well as estate planning, and various cross-border implications of the borderless technology. However, across all these fields, the US's approach thus far is "wait-and-see" with the impact of any legislation or regulation being heavily considered in part due to a lack of full understanding of the technology and in part due to the effects on innovation such regulation could result in. This hesitation is reflected at the federal level, with the main attention to blockchain coming from the administrative and agency level, with a focus on the financial industry and crypto assets. Rather than issuing express regulations, warnings and guidelines have been the preferred method of intervention. At the state level, legislatures are more active, mainly in the cryptocurrency sphere (see question 8) but these range from outright hostility to the technology to blanket exemptions from applicable rules. The US generally prefers case-by-case enforcement on specific applications of blockchain technologies (see question 18); however, there have been active attempts to put blockchain bills in front of the Senate. In February 2019, the Blockchain Promotion Act was reintroduced for the second time and approved in July. This bill established a blockchain working group within the Department of Commerce, which will be working over the next year to provide a formal definition of blockchain that is able to keep abreast with the fast evolution of the technologies and application of blockchain, which would be another step in the direction of enabling coherent legislation. In April, another blockchain-related bill was introduced, the Token Taxonomy Act, which could clarify the status of certain cryptocurrency activities.

**4. What is the current attitude of the government and of regulators to the use of blockchain technology in your jurisdiction?**

Despite the US's legislative "wait-and-see" approach, US agencies are active on the




enforcement front to address case-by-case issues arising from blockchain and its offshoots when perceived to violate the existing legal framework. This activity has spread to the courts, which are also getting involved through state as well as private action. Except for a few states expressly hostile, blockchain is seen as an opportunity to attract investment and even the local governments have started implementing blockchain-centred initiatives within their organizations.

**5. Are there any governmental or regulatory initiatives designed to facilitate or encourage the development and use of blockchain technology (for example, a regulatory sandbox)?**

The US is following its European counterparts with a regulatory sandbox approach to develop blockchain in the financial technology industry. The Consumer Financial Protection Bureau (“CFPB”) and Commodity Futures Trading Commission (“CFTC”) have joined forces to create a regulatory sandbox for fintech companies, similar to those created in the U.K., aimed, amongst others, at cryptocurrencies and other financial technologies based on blockchain (the “Disclosure Sandbox”). This comes following Arizona’s regulatory sandbox initiative also related to cryptocurrency. As these sandboxes are still works-in-progress (Arizona is still seeking applicants and the CFPB is revising the policy following a period of public comment), the legal field has yet to see the outcome of these initiatives but the goal per Mick Mulvaney, then acting director of the CFPB, is to find the regulatory “sweet spot” with respect to regulation to protect investors and instil confidence in the markets, without discouraging people from entering the marketplace in the first place due to overregulation.

**6. Have there been any recent governmental or regulatory reviews or consultations concerning blockchain technology in your jurisdiction and, if so, what are the key takeaways from these?**

The federal government has been swift to create various task forces to address the various blockchain issues, ranging from the specialized Cyber Unit created in 2017 by the SEC in charge of securities violations pertaining to cryptocurrency and digital



assets, to the more recent working group within the Department of Commerce to define blockchain in 2019. Consultations have also taken the shape of calls for public comment, such as in the context of the Disclosure Sandbox. For the more recent projects, the takeaways are still to be seen but from the analysis to date, blockchain does not escape the existing legislative and regulatory framework and the agencies are keen to avoid possible issues of fraud and manipulation that can be caused by such technologies.

## **7. Has any official guidance concerning the use of blockchain technology been published in your jurisdiction?**

At the federal level, agency guidance is thus far the best insight provided into the application of the legal framework to blockchain. With the rise of ICOs in 2016 and 2017, the SEC issued various statements to investors warning about the risks and potential of fraud when investing in ICOs. To complement these initial releases, in April 2019, the SEC also published specific regulatory guidance for token issuers that outlines when these may fall under securities classifications. The SEC is not the only agency to become involved, and as early as 2014, the CFTC found Bitcoin to be a commodity, subject to sales regulations, but stopped short of expanding the commodity designation to other crypto assets and would be deciding individual crypto asset designations on a case-by-case basis. The Internal Revenue Service (“IRS”) also released guidance regarding the tax implications of transactions involving virtual currencies. The guidance on virtual currencies is a bit dated, going back to March 2014 and treats virtual currencies as property for US federal tax purposes without a de minimis exemption. This was followed in July 2018 by a virtual currency compliance campaign and in 2019, the IRS started sending letters to tax payers regarding reporting past virtual currency transactions.

A common thread with regard to the various official guidance is that it mainly related to the application of blockchain to crypto assets, rather than the overarching technology of blockchain, for which the US has yet to see any detailed guidance.

**8. What is the current approach in your jurisdiction to the treatment of cryptocurrencies for the purposes of financial regulation, anti-money laundering and taxation? In particular, are cryptocurrencies characterised as a currency?**

Cryptocurrency is the focus of most of the blockchain-related questions arising in the US. As discussed earlier, there has been some acceptance towards Bitcoin but concerns about new cryptocurrencies, such as the Facebook's Libra, are still in full debate in the Senate. The US has a split between pro-blockchain states, passing favorable regulations such as cryptocurrency exemptions from state securities laws, blockchain-cautious states, issuing warnings mainly related to cryptocurrency investments, and blockchain-restrictive states, issuing cryptocurrency restrictions.

**9. Are there any prohibitions on the use or trading of cryptocurrencies in your jurisdiction?**

The US has no outright ban on the use or trading of cryptocurrencies. That said, any such use or trading remains subject to various non-cryptocurrency specific rules governing the financial regulations imposed by the CFTC, which for example found Bitcoin to be a commodity and subject to its jurisdiction, the SEC, if the cryptocurrency is deemed to be a security, and also the IRS and Financial Crimes Enforcement Network's applicable regulations. The US may not have created many rules specific to cryptocurrencies, but this does not exempt cryptocurrency from the current regulations already in place which may be triggered by such transactions.

**10. To what extent have initial coin offerings taken place in your jurisdiction and what has been the attitude of relevant authorities to ICOs?**

With the development of ICO funding beginning back in 2014, and a first peak in 2016, the SEC created a new Cyber Unit to, among other things, investigate and bring

charges against ICOs and issued various statements to investors warning about the risks and potential for fraud when investing in ICOs. ICOs reached their peak in late 2017 and early 2018 but with the increased scrutiny by the SEC which published additional guidance in April 2019 further reinforcing that ICOs could fall under the purview of securities laws and therefore under the SEC, ICOs are no longer viewed as a medium to bypass the regulatory framework associated with traditional funding sources to raise money.

**11. If they are permissible in your jurisdiction, what are the key requirements that an entity would need to comply with when launching an ICO?**

Securities laws are the main concern when it comes to ICOs. The issue is whether the cryptocurrency underlying the ICO can be qualified as a security under the Howey test, which looks at the four factors in light of the April 2019 SEC guidance, namely whether there is: (1) an investment of money; (2) a common enterprise; (3) a reasonable expectation of profits; (4) the managerial or entrepreneurial efforts of others. If found to be a security, a public offering or sale of any security must be made pursuant to either an effective registration statement on file with the SEC or under an exemption from registration.

An ICO is not de facto categorized as a securities offering. However, the safest approach to classification as a non-security is for companies to (i) register the ICO and issue a prospectus, (ii) utilize an exemption from registration, for example under regulation D, or (iii) seek No Action Letters (“NALs”) from the SEC’s Division of Corporate Finance to confirm no enforcement actions will be undertaken should the company sell the crypto assets without first registering them under the Securities Act of 1933 and the Securities and Exchange Act of 1934. This will prevent situations like a cease-and-desist order issued by the SEC when the SEC determines an ICO is an unregistered, non-exempt securities offering. Other than complying with the securities law requirements or requesting a NAL, there is no bright line approach to determining the status of the crypto asset tied to the ICO. The determination as to whether an ICO crypto asset is a “security” is very fact specific and there have already been disagreements between the SEC and the courts.



**12. Is cryptocurrency trading common in your jurisdiction? And what is the attitude of mainstream financial institutions to cryptocurrency trading in your jurisdiction?**

There is a multitude of cryptocurrency exchanges, which allow consumers to exchange their cryptocurrency into various assets, whether it be fiat or other cryptocurrencies. These are for the most part largely provided online but there are a few brick-and-mortar businesses as well. There are a few mainstream financial institutions that offer limited access to a limited number of cryptocurrencies as well. Nevertheless, with the 2018 Bitcoin crash, there has been some hesitation among the largest financial institutions to transact in cryptocurrencies. For example, Goldman Sachs announced in early 2018 that it was planning to open a Bitcoin trading operation but the plans have likely been paused. The hesitation is likely caused by increased business risk and decreased demand from customers following increased SEC enforcement in the wake of the crash and other sources of regulatory uncertainty. The many failed applications to the SEC for approval to offer an Exchange Traded Fund backed by Bitcoin illustrates the regulatory risk for even established financial institutions entering the cryptocurrency market. In addition to federal regulation, some states have been active in regulating exchanges and trading activity; for example, the New York State Department of Financial Services adopted a set of regulations requiring a “bitlicense” to engage in any “virtual currency business activity”. Nevertheless, Baakat, a bitcoin futures exchange and digital assets platform, will launch with approval on September 23, 2019 as a product of the Intercontinental Exchange, the parent company of the New York Stock Exchange.

**13. Are there any relevant regulatory restrictions or initiatives concerning tokens and virtual assets other than cryptocurrencies (e.g. trading of tangible property represented by cryptographic tokens)?**

At the federal level, the SEC and CFTC suggested little effort to distinguish between types of cryptocurrency, e.g., asset-backed tokens (deriving value based on the



underlying asset that does not exist on the blockchain), utility tokens (deriving value from the demand for the issuer's service or product). However, in April 2019, members of the US House of Representatives reintroduced the Token Taxonomy Act, which would establish digital tokens as a new digital asset, and would mainly address utility tokens, which would be exempt from securities laws and subject to a different tax structure.

14. **Are there any legal or regulatory issues concerning the transfer of title to or the granting of security over tokens and virtual assets?**

Other than the securities issue (see question 10), one of the issues specific to tokens and virtual assets that have properties other than as a store of value and medium of exchange is the accounting for such assets. There lacks guidance on the accounting of such assets, which could fall under a variety of different standards. For example, purchased with the intention of resale, the tokens partially meet the definition of inventory under both U.S. GAAP and IFRS, despite not being tangible in nature. There is also the issue of accounting these as "intangible assets" because tokens and virtual assets have the potential of an indefinite use, with no expiration date or limit of the period within which they can be exchanged for cash, goods or services.

15. **To what extent are tokens and virtual assets in use in your jurisdiction? Please mention any key initiatives concerning the use of tokens and virtual assets in your jurisdiction.**


ICOs, also referred to as token sales, predominated the use in this area. These have mainly concerned utility tokens but the tokenization of assets is also budding, allowing for either a fractional ownership of the tangible asset in the shape of a token or the pegging of a cryptocurrency to some secondary source to minimize volatility. Tokenized assets is overall gaining traction in the US, ranging from real estate to collateralized stablecoins.

**16. How are smart contracts characterised within your legal framework? Are there any enforceability issues specific to the operation of smart contracts which do not arise in the case of traditional legal contracts?**

The US is still relying on its traditional legal contract regime to account for smart contracts, including state law implementations of the statute of frauds and the Uniform Commercial Code (“UCC”), and some not-blockchain-specific tech-related updates such as the Electronic Signatures in Global and National Commerce Act, and state laws modelled on the Uniform Electronic Transactions Act (“UETA”). Both at the federal and state level, these laws ensure a general recognition that e-signatures are legal and can create a binding contract. There has been little litigation, so it is difficult to determine if the current infrastructure is sufficient. There is some debate whether states that do not expressly recognise that contracts can be formed via an “electronic agent,” technically recognize smart contracts. Over the past few years, several states have sought to clarify the enforceability of smart contracts, akin to legal agreements. However, similar to the issues with blockchain legislation as a whole, there remains no uniform definition of “smart contracts” and what they encompass. From this seminal issue of what is being legislated, flows directly the uncertainty of which legal regime to apply. As a consequence, there have been movements urging for a clear classification of smart contracts and even urging the creation of a new category specific to smart contracts affecting blockchain-based assets.

**17. To what extent are smart contracts in use in your jurisdiction? Please mention any key initiatives concerning the use of smart contracts in your jurisdiction.**

One main proponent of the movement to provide a clear classification of smart contracts is the Smart Contracts Alliance, which is an initiative by the Chamber of Digital Commerce, an American advocacy group founded in 2014 that promotes the emerging industry behind blockchain technology, bitcoin, digital currency and digital assets. As illustrated in the 2018 CFTC primer on smart contracts, there is a plethora of



uses for smart contracts from the very basic use in vending machines, to more complex transactions such as credit default swaps. To help navigate this technology, the CFTC issued a primer to be used as an educational tool to understand the implications as well as highlight some of the risks and challenges associated with smart contracts.

18. **Have there been any governmental or regulatory enforcement actions concerning blockchain in your jurisdiction?**

The federal agencies have been actively bending blockchain to the existing legal framework, especially as it relates to its cryptocurrency applications. The SEC has been active in the ICO sphere, for unregistered, non-exempt ICOs involving securities, starting with the DAO ICO back in 2016. Beyond the securities laws violations, through these actions, the SEC Chairman, Jay Clayton, emphasized that cyber-enabled crime is a focus of the SEC and that the regulators should work together to find solutions for these risks. The Federal Trade Commission has clamped down on alleged pyramid schemes involving cryptocurrencies, the DOJ initiated suits for alleged schemes to defraud investors by marketing and selling fraudulent virtual currency and the CFTC also plays an active role in cryptocurrency enforcement. The IRS, through its recent guidance and IRS 6173 letters has indicated that there will be enforcement action should corrective filings for crypto transactions not be reported. Due to the global nature of blockchain, enforcement is not limited to US-centric actions and the Treasury Department, through the Treasury Department's Financial Crimes Enforcement Network and the Office of Foreign Asset Control, cannot be excluded from this discussion.

19. **Has there been any judicial consideration of blockchain concepts or smart contracting in your jurisdiction?**

The federal agencies defer to the courts to enforce certain of their actions against infringers but private litigation, mainly pertaining to cryptocurrency, is also developing both at the state and federal level. This has brought to light other aspects of legal violations through the use of blockchain beyond federal securities laws, including patent infringements, breach of contract and antitrust.

20. **Are there any other generally-applicable laws or regulations that may present issues for the use of blockchain technology (such as privacy and data protection law or insolvency law)?**

Due to blockchain's applicability across a range of industries, a vast range of laws are triggered by its use, including insolvency, where issues related to whether cryptocurrency of a debtor constitutes part of the debtor's estate are still undecided. With the spread of blockchain applications come the additional layers of regulatory hurdles, such as the development of blockchain in the healthcare sphere, and the data privacy requirements of the Health Insurance Portability and Accountability Act of 1996. There remains great uncertainty as to whether blockchain should trigger its own regulation and the scope of applicability and transferability of the current legal regime.

21. **Are there any other key issues concerning blockchain technology in your jurisdiction that legal practitioners should be aware of?**

With the lack of an established blockchain framework at a federal level, the US has seen the growth of broad and somewhat divergent approaches to blockchain at the state level. This double-layered complexity is not unknown in other areas and until federal law pre-empts state law, as proposed by the Token Taxonomy Act, it is something to be mindful of in this jurisdiction when transacting in the US.