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## Client Alert: Ohio Law Cements a Link for Blockchain Technology

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Earlier this month, Ohio legislation became effective that removes doubt as to the enforceability of electronic signatures, records, and contracts that are secured through blockchain technology. The amendment makes Ohio one of only a few states to expressly identify blockchain technology in its laws – positioning Ohio as a blockchainfriendly state for a technology, around which both regulatory and business uncertainty loom due to its infancy and breadth of potential applications.

### Blockchain

Blockchain is distributed ledger technology, where a peer-to-peer network of computers (or nodes) maintains a decentralized ledger or registry to evidence transactions or transfers of value by using cryptographic tools and consensus protocols, ensuring that the transactions broadcasted across the network are secure, immutable, and democratically maintained by network members.

There are a number of variations of blockchain applications, but most applications use common core concepts where users can digitally sign and record transactions or transfers of data in a shared ledger within a network, and once published no such transaction or transfer can be changed. One such series of steps is the following: transactions or transfers of data are digitally signed using public key cryptography available to all on the applicable network, where a particular network user, intending to enter a transaction or transfer data, can do so by conveying assent to and "signing" such a transaction or transfer with the user's private key (i.e., a digital key known only by its owner) to verify the user's intent to be bound to such transaction or transfer. The binding transaction or transfer is then broadcast across the network and is verified by the network by using a consensus protocol.

Blockchain technology is being vetted, reviewed, and applied across a wide range of industries. For example, blockchain applications have been tested by capital market participants to increase efficiencies in the settlement and clearing of financial assets and to raise capital by creating and offering digital representations of financial or equity

products in initial coin offerings. Shipping and trade industries have used the technology as a supply-chain solution to store and secure real-time information on products moving throughout the supply chain, while the healthcare industry is hoping the distributed ledger technology can be used to create an efficient information exchange making electronic medical records disintermediated and secure. Sometimes referred to as "smart contracts," the blockchain technology provides a platform on which the logic of an agreement can be executed through code that responds to particular messages or transactions.

In each of the examples above, the transfer of a digital financial asset or an intended change in data across a blockchain network would require the transferor or sender to digitally sign such a transaction or change, thereby conveying its intent across the shared network to bind itself to the transfer or change. After verification of the transfer or change on the network, the transaction or data change would be electronically recorded pursuant to the protocol requirements of the applicable blockchain application and stored within it. As such, the legal enforceability of electronic signatures and records are essential in use of blockchain technology.

Federal and state governments are beginning to formulate regulations and legislation necessary to promote the continued innovation on the uses of blockchain, and a handful of first-mover states have taken action to make their respective states attractive to blockchain entrepreneurs, investors, and developers.

## Amending Ohio's Uniform Electronic Transactions Act

Ohio's new legislation amends Ohio's version of the Uniform Electronic Transactions Act (UETA), moving Ohio to the forefront of initial legislative blockchain acceptance.

UETA's primary objective is to establish the legal equivalence of electronic signatures and electronic records with manually signed signatures and paper records – and in so doing remove barriers to electronic commerce and technological advances in the use of electronic records, contracts, and signatures.

Under UETA Section 1306.01, an electronic signature is an electronic process logically associated with a record that is executed or adopted with an intent to sign. The new Ohio amendment adds the following assurance that blockchain would be covered as an electronic signature: "A signature that is secured through blockchain technology is considered to be in an electronic form and to be an electronic signature."

UETA also requires that an electronic record be shareable and retrievable. The new legislation makes it clear blockchain technology can be such an electronic record: "A record or contract that is secured through blockchain technology is considered to be in an electronic form and to be an electronic record."

## **Going Forward**

The amendment to the Ohio UETA is not the only initiative taken by the State of Ohio to signal its support of blockchain technology. On a limited, trial basis this fall, the Franklin County Auditor has employed blockchain technology (provided by a local Ohio company) to legally record the transfer of forfeited real estate properties. Other Ohio auditor's offices may follow that lead. In what is otherwise a technologically agnostic statute, Ohio's new express reference to blockchain in Ohio's UETA and the efforts of a local county recorder to test the technology have signaled Ohio as an ally and collaborator with blockchain entrepreneurs, investors, and developers. What remains to be seen are the multitude of potential commercial and governmental applications blockchain may lead to and what additional laws and regulations will be added as these applications multiple and gain wider acceptance.

If you have questions about regulations or legislation regarding blockchain technology or the amendment to the Ohio UETA, contact Zach Brumfield (ztbrumfield@vorys.com), Craig Auge (crauge@vorys.com) or your Vorys attorney.