

## Delaware Passes Law Permitting Companies to Use Blockchain Technology to Issue and Track Shares

### Overview

On Friday July 21, 2017, Delaware's Governor John Carney signed into law amendments to Delaware's General Corporation Law to account for the use of blockchain technology in corporate record-keeping.<sup>1</sup> The legislation will be implemented beginning August 1, 2017 and represents the culmination of an on going industry consultation and is part of a broader blockchain initiative. The initiative includes a concurrent technology project with partner Symbiont and was originally announced by former Delaware governor Jack Markell in May 2016.<sup>2</sup> The initiative also covers efficiencies in public record keeping and securities filings, which are not within the scope of this article.

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### What are the legislative amendments?

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The amendments will permit private companies incorporated in Delaware to issue and track shares of stock on a blockchain or distributed ledger. The amendments will allow companies and stockholders to enjoy the benefits of electronic trading while maintaining direct ownership of their shares.

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<sup>1</sup> A copy of the bill can be found here: <https://legis.delaware.gov/BillDetail?legislationId=25730>

<sup>2</sup> *The American Banker*, "Delaware blockchain measure seeks to change 'very base' of financial system," Brian Patrick Eha (June 13, 2017), available at <https://www.americanbanker.com/news/delaware-blockchain-measure-seeks-to-change-very-base-of-financial-system>

The legal changes have been effected through amendments to the General Corporation Law. Under the revisions, blockchain shares will be legally considered as a form of uncertificated securities. In the amendment to Section 219, the term "stock ledger" is to be defined to include ledgers "administered by or on behalf of the corporation," to permit a record keeping system utilizing blockchain databases. Within Section 224, a change has been made to permit all corporate records to be kept on "one or more electronic networks or databases (including one or more distributed electronic networks or databases)". In order to satisfy legislative requirements, the ledger must: (i) allow the production of a record of the company's stockholders; (ii) record certain mandatory information; and (iii) permit transfer of stock.

There is also a requirement within Section 224 that any record held on an electronic network or database must be capable of being converted into 'clearly legible paper form', upon the request of a person entitled to inspect the records. Section 224 goes on to clarify that such paper record derived from the electronic network or database would be valid and admissible in evidence and accepted for all other purposes that an original paper record would be. A further clarification was made in Section 232, confirming that "the use of, or participation in, one or more electronic networks or databases (including one or more distributed electronic networks or databases)" is considered within the existing definition of 'electronic transmission'.

Within the parallel technology platform (currently in development with Symbiont), many details are still being determined prior to the deployment of the technology, but it has been confirmed that the Delaware Division of Corporations will operate a network node to authenticate stock issuance.<sup>3,4</sup> Discussions with the U.S. Securities and Exchange Commission (the relevant U.S. Federal regulator for public companies) are ongoing as to whether similar issuance and tracking of shares can be implemented for public companies.<sup>5</sup> There is limited precedent for this, in December 2016 Overstock.com Inc issued a registered security on a blockchain platform developed by its subsidiary, tØ.com.<sup>6</sup> On July 19, 2017 Overstock announced that it has made an undisclosed investment in Symbiont. While this investment is a commercial development, it may indicate that the two pioneers of this technology for securities settlement will cooperate and take the next step of implementing a solution for public companies' shares.<sup>7</sup>

## Who will the legislation benefit?

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The legislation marks an important step in placing the issuance and transfer of corporate shares onto the future infrastructure of the financial system in a major commercial jurisdiction. Securities issuance and transfer has long been considered one of the most practical use cases for blockchain technology and companies will, from a legal perspective, soon be permitted to issue and transfer shares securely with near immediate settlement timing. The immutable nature of blockchains ensures that the benefits of digital asset uniqueness and ownership certainty can be combined with the convenience of electronic issuance and transfer. The cybersecurity strengths of blockchains are another potential benefit.

However the amendments may not be of immediate benefit to all companies. For example, small companies with limited stock ownership are unlikely to reap significant efficiencies from blockchain technology for limited issuances. In addition, companies that maintain some physical or certificated shares may not be able to take advantage of the efficiencies that

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<sup>3</sup> For further information, see HLS Forum on Corporate Governance and Financial Regulation, "Delaware Blockchain Initiative: Transforming the Foundational Infrastructure of Corporate Finance," Andrea Timianow and Caitlin Long (Mar. 16, 2017), available at <https://corpgov.law.harvard.edu/2017/03/16/delaware-blockchain-initiative-transforming-the-foundational-infrastructure-of-corporate-finance/>

<sup>4</sup> *The American Banker*, "Who owns what, really? In securities, Delaware may soon clear things up," Brian Patrick Eha (July 5, 2017), available at <https://www.americanbanker.com/news/who-owns-what-really-in-securities-delaware-may-soon-clear-things-up>

<sup>5</sup> *The American Banker*, "Delaware blockchain measure seeks to change 'very base' of financial system," Brian Patrick Eha (June 13, 2017), available at <https://www.americanbanker.com/news/delaware-blockchain-measure-seeks-to-change-very-base-of-financial-system>

<sup>6</sup> Tzero.com, "Overstock begins trading its shares via the Bitcoin blockchain" (Dec. 16, 2016), available at <https://tzero.com/news/2016/12/16/overstock-begins-trading-its-shares-via-the-bitcoin-blockchain>

<sup>7</sup> Coindesk.com, "'Mistake' Corrected: Overstock Invests in Blockchain Startup Symbiont," Michael del Castillo (July 19, 2017), available at <http://www.coindesk.com/overstock-investment-symbiont-resurrected-delaware-blockchain-law/>

blockchain technology can provide for rapid share transfer if the blockchain solution is not a complete record of stock ownership.

## How will it impact the securities industry?

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Under the current system, stock holders generally transfer stocks through the use of a centralized intermediary, the Depository Trust Company (the DTC), which generally settles on a T+3 basis (i.e. a three-day settlement period). The Securities and Exchange Commission recently voted to lower that settlement timeframe for stock transfers to T+2, but the ultimate goal of blockchain technology is to reduce settlement times to T-0.<sup>8</sup> The legal problems of the existing intermediary share proxy structure are well documented. The most noteworthy and recent example is a speech made by the Vice Chancellor of the Delaware Court of Chancery at a meeting of the Council of Institutional Investors in September 2016. A copy of the remarks can be found here.<sup>9</sup>

Alongside the general benefits of efficiency and security, smart contract technology could also be used to code any requirements or preferred options into the digital shares themselves so that covenants are automatically complied with. Voting and other corporate actions could be simplified and audits streamlined. Regulators could also have real-time access and transparency. NASDAQ and other companies are currently working to develop blockchain solutions addressing such questions.<sup>10</sup>

## Why Delaware?

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Delaware has a long history of being at the forefront of U.S. commercial law and has maintained a position as the leading state for corporate incorporations. Over two-thirds of Fortune 500 companies are incorporated in the state. For this reason, Delaware monitors and updates its corporate laws annually, and the blockchain legislation initiative is the most recent example of Delaware's commitment to ensuring it maintains its reputation as a convenient and advanced jurisdiction of incorporation.

## International Developments

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Outside of Delaware, we are not aware of any identical initiatives in other U.S. states or overseas, although the following countries have some similar projects. In **France**, an ordinance that would permit the issuance and transfer of non-listed securities is under consultation.<sup>11</sup> In **Italy**, a task force has been launched by CONSOB (the relevant regulatory authority) in cooperation with industry and academia, on the applicability of blockchain to securities markets and the London Stock Exchange's Italian subsidiary (Borsa Italiana) is testing a limited form of private shares blockchain.<sup>12</sup> In **Germany**, technological trials are being undertaken by Deutsche Börse (in conjunction with the NAGA group) relating to the trading of virtual assets.<sup>13</sup> In **the UK**, the FCA (the primary regulator) has a fintech regulatory sandbox as part of its Project Innovate initiative, but there has been no specific regulatory proposal to permit blockchain share issuance and transfer (save for the LSEG's Italian-based trial referenced

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<sup>8</sup> Securities and Exchange Commission, "SEC adopts T+2 Settlement Cycle for Securities Transactions," press release (Mar. 22, 2017), available at <https://www.sec.gov/news/press-release/2017-68-0>

<sup>9</sup> Council of Institutional Investors Keynote Speech, "The Block Chain Plunger: Using Technology to Clean Up Proxy Plumbing and Take Back the Vote," Vice Chancellor J. Travis Laster (Sep. 29, 2016), available at [http://www.cii.org/files/09\\_29\\_16\\_laster\\_remarks.pdf](http://www.cii.org/files/09_29_16_laster_remarks.pdf)

<sup>10</sup> See Nasdaq.com, "Nasdaq Linq enables first-ever private securities issuance documented with blockchain technology" (Dec. 30, 2015), available at <http://ir.nasdaq.com/releasedetail.cfm?releaseid=948326>; "Building on the Blockchain: Nasdaq's Vision of Innovation" (Mar. 20, 2016), available at [http://business.nasdaq.com/Docs/Blockchain%20Report%20March%202016\\_tcm5044-26461.pdf](http://business.nasdaq.com/Docs/Blockchain%20Report%20March%202016_tcm5044-26461.pdf)

<sup>11</sup> See Ministry for Economy and Finance's public consultation (Mar. 24, 2017), available at <http://www.tresor.economie.gouv.fr/File/435107>

<sup>12</sup> See Reuters.com, "London Stock Exchange Group tests blockchain for private company shares", Anna Irrera and Jemima Kelly (July 19, 2017), available at <https://www.reuters.com/article/us-lse-blockchain-idUSKBN1A40ME>

<sup>13</sup> See Deutsche-Boerse.com, "NAGA GROUP and Deutsche Börse form the joint venture Switex," (Dec. 1, 2016), available at <http://deutsche-boerse.com/dbg-en/media-relations/press-releases/Naga-Group-and-Deutsche-Boerse-form-the-joint-venture-Switex/2824238>

above). In **Australia**, technology trials by ASX and CBA and Queensland Treasury Corporation are ongoing.<sup>14</sup> In **Japan**, the FSA (the primary regulator) has permitted blockchain trials for stock trading infrastructure on a case-by-case basis.<sup>15</sup> In **Singapore**, the MAS (the primary regulator) has announced a project with the Singapore Exchange (SGX) which will focus on efficiencies in the fixed income securities trading and settlement cycle.<sup>16</sup>

Lastly, it is possible that local law issues, such as taxes applicable to stock transfers, security or registration, might arise in the context of a node operating in, or being hosted from, a foreign jurisdiction. Such questions can arise in the use of decentralized networks generally, but the enactment of the Delaware law may bring further attention to these questions.

Further Allen & Overy insights into blockchain technology and fintech more generally, can be found [here](#).

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<sup>14</sup> See Australian Financial Review, "Commonwealth Bank puts government bonds on a blockchain," James Evers (Jan. 24, 2017), available at <http://www.afr.com/technology/cba-puts-government-bonds-on-a-blockchain-20170123-gtx1ff> and ASX.com, 'CHESS Replacement', available at <http://www.asx.com.au/services/chess-replacement.htm>

<sup>15</sup> See Nikkei.com, "Japan Exchange Group cleared to adopt fintech," (Jan. 7, 2017), available at <http://asia.nikkei.com/Markets/Tokyo-Market/Japan-Exchange-Group-cleared-to-adopt-fintech>

<sup>16</sup> See Monetary Authority of Singapore, "MAS working with industry to apply Distributed Ledger Technology in securities settlement and cross border payments," (Mar. 9, 2017), available at <http://www.mas.gov.sg/News-and-Publications/Media-Releases/2017/MAS-working-with-industry-to-apply-Distributed-Ledger-Technology.aspx>