

**ICMA Brief:**

**DLT-related legislation and regulatory frameworks in capital markets**

**December 2019**

**Introduction**

There have been a growing number of use cases of Distributed Ledger Technology (DLT) in the international bond markets over the last three years.<sup>1</sup> While the majority of transactions have been of experimental nature, legal and regulatory uncertainty around the treatment of DLT appears to be one of the key challenges to its broader adoption.<sup>2</sup> There is a consensus that regulation is generally designed to be technology neutral, however, regulators and legislators have adopted different approaches to provide greater clarity and accommodate the use of DLT in the financial sector.

This paper seeks to provide a non-exhaustive overview of recent DLT regulatory guidance, legislative initiatives, as well as related strategy papers and publications in selected jurisdictions across Europe, North America, and Asia-Pacific. Its aim is to provide a sense of the direction of travel, anticipating future regulatory DLT guidance and legislative change, which will pave the way for broader adoption of DLT. While the intention is not to cover regulatory approaches to crypto assets, relevant guidance and developments are considered insofar as they relate to the underlying technology.

This complements ICMA's [Distributed Ledger Technology \(DLT\) Regulatory Directory](#) (December 2019) as well as ICMA's previous publications on [Regulatory approaches to Fintech and innovation in capital markets](#) (September 2018) and [FinTech, DLT, and regulation](#) (April 2017).

**Overview**

Adoption of new technologies comes with specific risks and uncertainties. Key areas addressed by DLT legislation, regulation, and guidance across multiple jurisdictions fall within the below categories:

**Legal Status:** Legal and regulatory interpretations have been addressed through legislative definitions of DLT and smart contracts, enhancement of digital securities investor rights, and in some jurisdictions the acknowledgement of technology-neutrality.

**Interoperability & Standardised Protocols:** International standards setting bodies are focused on the risk of fragmentation through promotion of industry consultation and technical paper releases.

**Security/Resilience & Corporate Governance:** Multiple jurisdictions have adopted guiding business principles as foundations for their DLT regulatory frameworks. Licencing and registration frameworks have also mitigated these business risks operating on DLT.

**DLT-related legislation and Regulatory Frameworks**

Multiple jurisdictions are taking initiative in providing clarity to the market with legal definitions and specific requirements for DLT operations.

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<sup>1</sup> Over 30 initiatives including proof-of-concepts and live transactions have been observed in the last three years as [referenced by ICMA](#).

<sup>2</sup> In addition to technical (eg scalability), operational (eg interoperability) and governance-related challenges of DLT networks.

## Europe: EU and non-EU

France's [Decree No. 2018-1226](#) (in French) of 24 December 2018 provided provisions for its previous [Ordinance no. 2017-1674](#) (in French) of 08 December 2017, allowing for DLT representation and transfer of ownership of financial securities. This builds on the initial [Ordinance no. 2016-520](#) (in French) of 28 April 2016 allowing short-term note 'mini-bond' issuance on DLT (DEEP in French). [Law no. 2019-486](#) (in French) "Loi PACTE" of 22 May 2019 also introduces a special regulatory status for certain Digital Asset Service Providers ("PSAN" in French) and licensing requirements for non-financial digital asset custodian services.<sup>3</sup>

Luxemburg's [Bill of Law 7363](#) (in Luxembourgish), passed 14 February 2019 inserted new article 18bis into its amended Law of August 1st 2001 on the circulation of securities. The new article states custodians may use secure electronic registration devices including distributed electronic registers or databases and transfers are equivalent to wire-transfers between securities accounts.<sup>4</sup> The means of storage and transfer via such electronic registers does not alter relevant legal or regulatory requirements of the security itself.<sup>5</sup>

Italy' [Law No. 12/2019](#) of 11 February 2019 with [Decree Law No. 135, \(Decreto Semplificazioni\)](#) (in Italian) of 14 December 2018 defined DLT and smart contracts, recognised legal effects of electronic timestamps and also electronic storage of documents on DLT.<sup>6</sup> Implementing technical standards are expected to be published by the Digital Italy Agency (AgID) in the coming months.

The Russian Duma established its [Federal Law No. 34-FZ](#) (in Russian) 01 October 2019 – making amendments to parts one, two and article 1124 of part three of the Civil Code of the Russian Federation to enhance digital rights and electronic transactions validity, receipts, and introduced smart contracts concept.<sup>7</sup>

Other jurisdictions have developed standalone DLT regulatory frameworks to further innovation hubs and protect investors. Gibraltar's [Financial Services \(Distributed Ledger technology Providers\) Regulations 2017 \(LN.2017/204\)](#), commenced 01 January 2018, sets out 9 guiding principles for DLT business conduct in addition to setting definitions, licensing and registration requirements. Gibraltar's Financial Services Commission (GFSC) also provides an overview of its [DLT framework](#) on a dedicated web page.

Liechtenstein's [Tokens and Trustworthy Technology Service Providers Act](#) (TVTG abbreviated in German) of 03 October 2019 is another example of recent regulatory changes to provide legal certainty for digital securities and improve investor and asset protection. TVTG provides definitions for Trustworthy Technologies (TTs), TT systems, tokens and identities among other terms. TVTG also requires registration of DLT based financial services that do not fall under current financial market legislation. The Act will enter into force 01 January 2020.

The [Malta Digital Innovation Authority \(MDIA\) Act](#), [Innovative Technology Arrangement and Services \(ITAS\) Act](#), and [Virtual Financial Assets \(VFA\) Act](#), all in effect from 01 November 2018, established the Malta Digital Innovation Authority, the Technology Service Provider registration regime, and a regulatory framework for ICOs and crypto exchanges respectively. These Acts are part of Malta's DLT regulatory leadership strategy as set out in its [Innovative Technology Arrangements Guidelines](#)

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<sup>3</sup> The Law Reviews, September 2019. [The Virtual Currency Regulation Review - Edition 2 France](#).

<sup>4</sup> Elvinger Hoss, 18 February 2019. [Bill of Law 7363 was approved on 14 February 2019](#).

<sup>5</sup> Ibid

<sup>6</sup> Hogan Lovells, 15 February 2019. [Italy recognises the legal value of DLTs and smart contracts](#)

<sup>7</sup> Gorodissky & Partners, 17 May 2019. [New law introduced to regulate digital rights](#)

(October 2018) public consultation paper and recommendations from the National Blockchain Strategy Taskforce advisory committee.

### *North America*

In the United States, over 28 DLT-related resolutions and bills have been enacted or adopted at the State jurisdiction level. Notable Bills are Arizona's [H.B. 2417](#) (signed by Governor March 2017), [H.B. 2602](#) (signed by Governor April 2018), Illinois' [H.B. 5553](#) creation of Blockchain Technology Act (Passed House April 2018) and most recently Maryland's [S.B. 136](#) (effective 01 October 2019) providing DLT/Blockchain definitions and legal status of smart contracts. Other Bills provide support for the development of blockchain technology such as Connecticut's [S.B. 443](#) (signed by Governor June 2018) and New Jersey's [S.B. 2297](#) (passed Senate December 2018). A comprehensive list of [Blockchain State Legislation](#) is maintained by the NCSL.<sup>8</sup>

### *Asia*

The Cyberspace Administration of China (CAC) released its [Regulations on the Management of Blockchain Information Services](#) (in Chinese) which came into effect 15 February 2019. Key components include registration of individual and business users of blockchain services (real-names), periodic safety/security inspections of the services and a security assessments requirement to be undertaken for each new product and function of the service.<sup>9</sup> The first list of 197 blockchain-based services reviewed and filed by the CAC was [publicly released](#) 30 March 2019.

### **Recent publications and guidance on DLT**

Over the last two years, international regulators have published a number of research papers and assessments in relation to DLT, while international standard setting bodies have published DLT-specific standards. At national level, regulators have provided guidance, notably in jurisdictions where amendments to the regulatory framework are not envisaged or are being considered.

### *Global*

From a global perspective, the FSB released its [Decentralised financial technologies – Report on financial stability, regulatory and governance implications](#) (June 2019) and the International Telecommunication Union (ITU) published its [Technical Report FG DLT D4.1: Distributed ledger technology regulatory framework](#) (August 2019) to discuss DLT regulatory concerns and recommendations. The BIS also released its [Working Paper No 811](#) 'Embedded supervision: how to build regulation into blockchain finance' (September 2019). The International Standards Organisation (ISO) has published its first Blockchain/DLT standards [ISO/TR 23455:2019](#) (September 2019) as part of their [Strategic Business Plan ISO/TC 307](#).

### *Europe*

The ECB FinTech Task Force published its [Potential use cases for innovative technologies in securities post-trading report](#) (January 2019). The European Commission's EU Science Hub released its [Blockchain Now And Tomorrow](#) report (July 2019), the Blockchain Observatory & Forum published its [Legal and regulatory framework of blockchains and smart contracts](#) report (September 2019) and the EC's Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG) published its [30 recommendations on regulation, innovation and finance](#) (December 2019). The European

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<sup>8</sup> NCSL, [Blockchain State Legislation](#), last updated 28 March 2019

<sup>9</sup> Norton Rose Fulbright, February 2019. [China issues new regulation on blockchain](#)

Parliament's [Resolution on distributed ledger technologies and blockchains \(2017/2772\(RSP\)\)](#) of 03 October 2018 was also raised.

### *National*

BaFin released its [Perspectives Issue 1. Digitalisation](#) (August 2018) and [Tokenisation](#) publication (May 2019). The German Federal Government also published its [Blockchain Strategy](#) paper (September 2019) following an earlier consultation [Key issues paper on regulatory treatment of electronic securities and crypto tokens](#) (March 2019).

FCA has previously released guidance through [FS17/4: Distributed ledger technology](#) feedback statement (December 2017). The FCA, BoE and HM Treasury also released their [Cryptoassets Taskforce: final report](#) (October 2018). Most recently, the UK Jurisdiction Taskforce published its [Legal statement on cryptoassets and smart contracts](#) (November 2019) after [Public Consultation](#) (May 2019) on the current legal status and uncertainty of cryptoassets, DLT and smart contracts.

Other authorities are maintaining DLT information and guidance on dedicated webpages such as MAS's [Blockchain/DLT](#) page and ASIC's [Information Sheet 219 \(INFO 219\)](#).

### **What's on the horizon?**

Several national authorities, government-supported industry associations and international organisations have published consultation papers regarding the future direction of DLT regulation.

The Law Commission (UK) published its [Consultation Paper on Intermediated Securities](#) (August 2019) which discusses the adoption of DLT for facilitation of shareholder rights and within the intermediated securities chain. A final report is expected Q3 2020.<sup>10</sup>

The German Government's [Blockchain Strategy](#) adopted in September 2019 outlines its policy framework plan to reform German securities law. One key priority for blockchain within the financial sector is focused on electronic debt securities with proposed amendments to the Debt Securities Act (Schuldverschreibungsgesetz). Draft legislation is expected this year to allow for electronic bonds as a first step in electronification of additional securities.<sup>11</sup>

The Swiss Federal Council has [adopted a dispatch](#) on the amendment of Switzerland's current legal framework for DLT/Blockchain. The proposal was developed via [consultation on improving framework conditions for blockchain/DLT](#) (March 2019) which discussed the possibility of creating an electronic registration of rights to increase legal certainty of DLT-based assets and an amendment of the Financial Markets Infrastructure Act (FMIA) to create a DLT Trading Facility regulatory category.<sup>12</sup> The Swiss Parliament is expected to examine the proposed legislative amendments early 2020.

At the EU level, ESMA Chair Steven Maijor in a keynote speech stated ESMA "will continue to monitor markets closely to see whether firms are able to meet these [security, privacy and interoperability] challenges, enabling them to deliver DLT applications in securities markets at scale" (February 2019).<sup>13</sup>

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<sup>10</sup> Law Commission, August 2019, [Intermediated securities](#)

<sup>11</sup> [Blockchain Strategy of the Federal Government](#), September 2019

<sup>12</sup> Swiss Federal Council, 22 March 2019, [Federal Council initiates consultation on improving framework conditions for blockchain/DLT'](#)

<sup>13</sup> Keynote speech by Steven Maijor (Chair), ESMA 26 February 2019, [Crypto-Assets: time to deliver. 3<sup>rd</sup> Annual FinTech Conference—FinTech and Regulation](#), p7

The EC's [Smart 2018/0038](#) Study on Blockchains: Legal, Governance and Interoperability Aspects release is expected Q1 2020. The study is expected to promote the development of policies and regulations within the European blockchain initiative.<sup>14</sup> The EC's EU Blockchain Observatory and Forum is expected to release its Digital Assets paper December 2019 to further discuss digital financial assets and existing regulation.<sup>15</sup>

The new EC's [political guidelines](#) by the new President Ursula von der Leyen show its digital policy as a top priority. Key outcomes of the policy are to 'jointly define standards for the new generation of technology that will become the global norm', including blockchain and quantum computing among others. The guidelines also propose a new 'Digital Services Act' to update the 2000 E-Commerce Directive. The Act would "update liability and safety rules for digital platforms, services and products".<sup>16</sup>

Within North America, further State Bills are expected to be approved in the US (see NCSL's page on [Blockchain State Legislation](#)) while Canada's CSA released its [Joint Consultation Paper 21-402: Proposed framework for Crypto-Asset Trading Platforms](#) (March 2019). Although the consultation is heavily focused on cryptoassets, the paper poses the question how a DLT based platform would mitigate system resiliency, integrity, and security controls risks.

From a global perspective, the outcomes of ISO's [Strategic Business Plan ISO/TC 307](#) will further assist industry and cross-jurisdiction consensus on DLT definitions, terminology and standard protocols to enhance interoperability. The plan is to be published prior to 2021.

## Conclusion

Legal and regulatory uncertainty surrounding DLT remains a key challenge for wider adoption of the technology. However, it is evident that multiple authorities have taken proactive steps in providing clarity to capital markets. This has ranged from publishing guidelines such as the UK's FCA [FS17/4](#) and Australia's ASIC [INFO 219](#), to introducing specific DLT legislation such as Liechtenstein's "[TVTG](#)" act and Luxemburg's [Bill of Law 7363](#), to adopting complete DLT regulatory frameworks as seen in [Gibraltar](#) and [Malta](#).

Future regulatory changes for DLT have been indicated in recent publications such as Germany's [Blockchain Strategy](#) and Switzerland's [Federal Council report to improve framework conditions for DLT](#).

We expect to see further standard setting and practical recommendations for DLT from international organisations with projects such as [ISO/TC 307](#) and ITU's [Technical Report FG DLT D4.1](#). In the shorter term, it can be expected that the implementation of proposed DLT legislative changes and the emergence of further definitions, requirements and guidance from a national perspective will pave the way for broader adoption of DLT in capital markets.

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<sup>14</sup> EC, [Study on Blockchains: Legal, Governance and Interoperability Aspects](#), 12 December 2018

<sup>15</sup> EU Blockchain Observatory and Forum, 27 September 2019, [Legal and regulatory framework of blockchains and smart contracts](#), p9

<sup>16</sup> EC President Ursula von der Leyen. [Political Guidelines for The Next European Commission 2019-2024](#)

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