

DLT-related legislation and regulatory frameworks

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.¹ 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.² 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 article 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 and standardised protocols:** International standard-setting bodies are focused on the risk of fragmentation through promotion of industry consultation and technical paper releases.
- **Security/resilience and corporate governance:** Multiple jurisdictions have adopted guiding business principles as foundations for their DLT regulatory frameworks. Licensing and registration frameworks have also mitigated these business risks operating on DLT.



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Legislation and regulatory frameworks

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

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

Europe: For instance, France's [Decree No. 2018-1226](#) of 24 December 2018 provided provisions for its previous [Ordinance no. 2017-1674](#) of 8 December 2017, allowing for DLT representation and transfer of ownership of financial securities. This builds on the initial [Ordinance no. 2016-520](#) of 28 April 2016 allowing short-term note "mini-bond" issuance on DLT. [Law no. 2019-486](#) "Loi PACTE" of 22 May 2019 also introduces a special regulatory status for certain Digital Asset Service Providers and licensing requirements for non-financial digital asset custodian services.³

Italy's [Law No. 12/2019](#) of 11 February 2019 with [Decree Law No. 135, \(Decreto Semplificazioni\)](#) of 14 December 2018 defined DLT and smart contracts, recognised legal effects of electronic timestamps and also electronic storage of documents on DLT.⁴ Implementing technical standards are expected to be published by the Digital Italy Agency (AgID) in the coming months.

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 on 1 January 2018, sets out nine 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.

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 Maryland's [S.B. 136](#) (effective 1 October 2019) providing DLT/Blockchain definitions and legal status of smart contracts. A comprehensive list of [Blockchain State Legislation](#) is maintained by the NCSL.⁵

Asia: The Cyberspace Administration of China (CAC) released its [Regulations on the Management of Blockchain Information Services](#) 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.⁶ 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 Standards Organisation (ISO) 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 Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG) published its [30 Recommendations on Regulation, Innovation and Finance](#) (December 2019).

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) and most recently the UK Jurisdiction Taskforce published its [Legal Statement on Crypto-Assets](#)

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

4. Hogan Lovells, 15 February 2019. [Italy recognises the legal value of DLTs and smart contracts](#)

5. NCSL, [Blockchain State Legislation](#), last updated 28 March 2019

6. Norton Rose Fulbright, February 2019. [China issues new regulation on blockchain](#)



Several further consultation and study papers on DLT are expected early in 2020, while several national authorities have released policy guidelines regarding the future direction of DLT regulation.

and *Smart Contracts* (November 2019) after [public consultation](#) (May 2019) on the current legal status and uncertainty of crypto-assets, 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 further consultation and study papers on DLT are expected early 2020, while several national authorities have released policy guidelines regarding the future direction of DLT regulation. The German Government's [Blockchain Strategy](#) adopted in September 2019 outlines its policy framework plan to reform German securities law to facilitate electronic bonds and the Swiss Federal Council has proposed amendments to allow for electronic registration of rights and increase legal certainty of DLT-lased assets among other objectives.

At the EU level, ESMA Chair Steven Maijoor in a keynote speech stated that 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"⁷ (February 2019), while the new European Commission's [political guidelines](#) proposed joint standard setting for new technologies, including blockchain.

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](#), to introducing specific DLT legislation such as Italy's [Law No. 12/2019](#), to adopting complete DLT regulatory frameworks as seen in [Gibraltar](#).

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](#). 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.

The full brief and DLT Regulatory Directory can be found on ICMA's [website](#).

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7. Keynote speech by Steven Maijoor (Chair), ESMA 26 February 2019, [Crypto-Assets: time to deliver. 3rd Annual FinTech Conference-FinTech and Regulation](#), p7