

# Security Token Offering

MFSA Capital Markets Strategy



CONSULTATION DOCUMENT

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## FOREWORD



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Chief Executive Officer

Financial services is constantly evolving and it is our objective to keep step. The MFSA is cognisant of the fact that innovation and new technologies may bring about certain challenges; however I am confident that by working together these challenges can be translated into opportunities for all stakeholders, including investors.

A thriving economy is not possible without the presence of a vibrant capital market, through which companies can raise capital and prosper. It is academically proven that capital markets have a direct **influence on a country's Gross Domestic Product (GDP), thus effecting an individual's financial condition and consumer confidence.** As part of its vision for financial services in Malta, the MFSA is assessing how Maltese capital markets can be taken to the next level. Our intention is to push towards having a wider and more efficient framework for businesses to raise capital, allowing entrepreneurs to expand their businesses. Additionally, a well-functioning capital market provides public investors with an opportunity to invest their savings with the objective of obtaining a higher return.

Following the enactment of a new framework regulating virtual financial assets, the MFSA is looking into the adoption of a supervisory approach relating to Security Tokens; a step forward for our capital markets. The Security Token Offering Policy being issued for consultation today, is part of an overarching Capital Markets Strategy. In line with Vision 2021, this strategy takes into consideration the evolving needs of the industry whilst ensuring high standards of investor protection and market integrity.

**The Authority's Capital Markets Strategy is being formulated on the basis of the following five pillars:**

- Pillar I - Defining the risk appetite of the Listing Authority;
- Pillar II - Revising the regulatory framework;
- Pillar III - **Strengthening the sponsors' regime;**
- Pillar IV - Investing in Human Capital and Technology; and
- Pillar V - Educating Investors.

The STO Policy, being issued for consultation today, forms part of Pillar II - **'Revising the Regulatory framework', underpinning the MFSA's Capital Markets Strategy. As a regulator, and as a jurisdiction,** through this Security Token Offering policy, we are once again striving to be at the forefront of financial services regulation.

With Security Token Offering being an interface between traditional securities offerings and technology-enabled securities offerings and trading, the MFSA is confident that Malta is distinctively positioned to offer a conducive environment for Security Token Offering. In this respect, we are aiming to continue strengthening the Maltese financial services industry, *inter alia* by enhancing our capital markets.

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## Introduction

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As the European Commission Vice-President Dombrovskis stated in his speech delivered at the Eurofi High-level Seminar 2019, *“We have to make sure that our financial sector rules do not inadvertently hinder this type of useful innovation. And this starts with legal certainty.”*

We believe that the use of technology can be beneficial to Capital Markets, *inter alia* by:

1. Enhancing transparency;
2. Mitigating settlement risk;
3. Mitigating intermediary risk;
4. Improving investors’ engagement with businesses in which they invest;
5. Developing **innovative types of securities to better meet Issuer’s capital needs and investors’ risk appetite.**

Notwithstanding the clear benefits, we must not ignore the challenges which technology brings with it such as, for example, risks relating to cybersecurity.

The need to follow international developments, aimed at enhancing investor protection, safeguarding market integrity and stability, for the securities sector is emphasised. Accordingly, it is important to acknowledge the following, specifically for securities admitted to trading on trading venues:

1. Transferable securities must be registered in one register;
2. Secondary trading must take place on properly registered exchanges complying with all current regulations on transparency, prevention of market abuse and reporting;
3. Certainty of ownership is fundamental. As such, all ownership must be recorded on a properly registered Central Securities Depository (“CSD”) which must run the settlement systems to ensure the integrity of the entire system;
4. The role of intermediaries in the distribution of transferable securities to retail investors.

**Building on Malta’s recently enacted VFA Framework**, which regulates initial VFA offerings<sup>1</sup> as a source of alternative financing, the MFSA is publishing this Consultation Document to establish legal certainty for STOs in the Maltese financial markets.

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<sup>1</sup> Commonly referred to as Initial Coin Offerings (ICOs)

This Consultation Document covers the following process:



It is therefore split into the following six sections:

- 1) Defining Security Tokens;
- 2) Applications for approval of prospectuses and/or admissibility to listing and trading of Traditional STOs;
- 3) Transparency Requirements;
- 4) Secondary Markets;
- 5) Market Abuse Regulation; and
- 6) Post-trade settlement.

### *Scope*

This document seeks **stakeholders' views on** a policy which compliments the VFA regime and continues to support innovation and new technologies for financial services in the area of STOs without compromising investor protection, financial integrity and financial stability. It has been prepared with the EU framework in mind and with the objective of providing guidance on the applicability of relevant EU legislation vis-à-vis STOs.

### *Consultation Period*

This Consultation is open to the public until 30 August 2019.

Industry participants and interested parties are invited to send their feedback to this Consultation Document via email to [capitalmarkets@mfsa.com.mt](mailto:capitalmarkets@mfsa.com.mt).

# 1 Defining STOs

Prior to discussing the applicability of legislation, it is critical to clarify the **meaning of the term 'STO' and the distinction between DLT assets<sup>2</sup>** which qualify as financial instruments and which would therefore be captured by the traditional legal framework, and other types of DLT assets which would fall out of scope of the traditional legal framework.

In order to determine whether a particular DLT Asset classifies as a financial instrument or otherwise, one should refer to the Financial Instrument Test ('FIT')<sup>3</sup>. The FIT aims to determine whether a DLT asset qualifies as [i] Electronic Money as defined under the Third Schedule to the Financial Institutions Act<sup>4</sup>; [ii] a Financial Instrument as defined under the Second Schedule to the Investment Services Act<sup>5</sup>, whether issued in Malta or otherwise; [iii] a Virtual Financial Asset; or [iv] a Virtual Token as defined under the Virtual Financial Assets Act<sup>6</sup>.

Should a security, following the FIT, qualify as a Financial Instrument, it **should be further analysed to determine if it is a "transferable security"** as defined by MiFID II. MiFID II<sup>7</sup> defines transferable securities as those classes of securities which are negotiable on the capital market<sup>8</sup>, with the exception of instruments of payment. Transferable securities are further referred to in the list of financial instruments contained in Section C of Annex I of MiFID II.

The Authority is proposing to further distinguish between those instruments which would be considered to fall under the traditional regime and defined as transferable securities in terms of MiFID II as follows:

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<sup>2</sup> "DLT asset" means –

- a. a virtual token;
- b. a virtual financial asset;
- c. electronic money; or
- d. a financial instrument, that is intrinsically dependent on, or utilises, Distributed Ledger Technology;

Article 2(2) Virtual Financial Assets Act, Chapter 590 of the Laws of Malta

<sup>3</sup> The Financial Instruments Test is outlined in the Virtual Financial Assets Act, Article 47 and the Virtual Financial Assets Rulebook, Chapter 2, R2-2.2.1.4. The Financial Instrument Test can be accessed through the following link:- [https://www.mfsa.com.mt/wp-content/uploads/2019/04/MFSA\\_FinancialInstrumentTest.xlsm](https://www.mfsa.com.mt/wp-content/uploads/2019/04/MFSA_FinancialInstrumentTest.xlsm)

<sup>4</sup> Chapter 376 of the Laws of Malta

<sup>5</sup> Chapter 370 of the Laws of Malta

<sup>6</sup> Chapter 590 of the Laws of Malta

<sup>7</sup> Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (MiFID II), Article 4(44)

<sup>8</sup> For the purposes of this Consultation Document, the Authority considers securities negotiable on the capital market, to specifically include securities negotiable on Regulated Markets, Multilateral Trading Facilities and Organised Trading Facilities and/or securities offered to the public as defined in the Prospectus Regulation 2017/1129

- a. Traditional transferable securities such as shares; bonds (including callable bonds); convertible debt securities; derivatives, asset-backed securities; the storage and/or transaction execution of which is intrinsically dependent on, or utilises Distributed Ledger Technology (“DLT”)<sup>9</sup>. In this case, the transferable security will have the same characteristics as a non-technology-enabled transferable security which is already recognised in a defined and existing legal framework. For the purpose of this Document this type of STOs will be referred to as “Traditional STOs”.
- b. A technology representation (a token, the storage and/or transaction execution of which is intrinsically dependent on, or utilises DLT) that may share some qualities with traditional transferable securities and may be classified as “other securities” in terms of MiFID II e.g. a token giving only the right to profits of certain investments of a business. For the purpose of this Document this type of STO will be referred to as “Other STOs”.

The Authority believes that legal certainty vis-à-vis the instrument itself is fundamental and therefore it is proposing to initially introduce the framework for Traditional STOs. This will avoid uncertainty on the very nature of the instrument, the manner in which it is legally created and consequently the rights of the investors at law.

In the case of Other STOs, the Authority is of the opinion that further analysis of the risks and challenges is important. In this respect the Authority is also considering the use of a FinTech Regulatory Sandbox as referred to in the FinTech Strategy Consultation Document dated 31 January 2019.

In this respect the Authority is taking a prudent approach in order to help the industry as a whole to gain experience on the market behaviour of STOs and any risks associated with the technological aspect in the traditional environment, without the additional risk of legal uncertainty.

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*Q1. Do you agree with the Authority's proposed categorisation of the different types of STOs?*

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<sup>9</sup> 'Distributed Ledger Technology or DLT means a database system in which information is recorded, consensually shared and synchronised across a network of multiple nodes as further described in the First Schedule of the Innovative Technology Arrangements and Services Act, whether the same is certified **under that Act or otherwise**', Article 2(2) Virtual Financial Assets Act, Chapter 590 of the Laws of Malta

## 2 Applications for approval of prospectuses and/or admissibility to listing and trading of Traditional STOs

### 2.1 *Nature of the Security*

The Authority shall rely on the determinations, as to the nature of the instrument in question, made by the issuer. The Authority may, at its own discretion require the Sponsor (or the Applicant in the case of an offer to the public) to submit to the Authority a legal opinion, confirming that the security classifies as a Traditional STO in line with the definition referred to in Section 1. It is expected that the legal opinion should explicitly refer to the specific legislation under which the securities would have been created. This statement should also be included in the Prospectus, as required by the Prospectus Regulation<sup>10</sup>.

### 2.2 **Issuers' Legal Structure**

A matter which needs to be given due consideration with regard to STOs is the legal nature of the issuing entity. The MFSA has been presented with proposals whereby the issuer opts for a corporate structure alternative to a public limited liability company<sup>11</sup>. Potential proposed structures presented include Foundations<sup>12</sup>, Trusts<sup>13</sup> or Securitisation Cell Companies<sup>14</sup>.

Whereas the MFSA wishes to endeavour to accommodate the proposed business models, and will be in due course reviewing the impact of such structures vis-à-vis regulatory requirements, the Authority is at the outset proposing that initially, applications for approval of prospectuses and/or admissibility to listing relating to Traditional STOs be submitted by issuers which are incorporated as limited liability companies (both Maltese and foreign).

In terms of Article 123 of the Companies Act<sup>15</sup>, every company is required to keep a register of its members. Furthermore, a company may make arrangements for the register of its members to be kept in dematerialised form. The MFSA is currently liaising with the Registry of Companies Agency in order to consider the necessary amendments to the Companies Act, which would enable companies to keep a register of members and adhere to the requirement of keeping securities in a dematerialised form, using DLT. The Authority believes that such amendment is important to allow companies

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<sup>10</sup> Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017

<sup>11</sup> 'Private company' is defined in article 209 of the Companies Act, Cap. 386 of the Laws of Malta. A public company is a company which is not a private company

<sup>12</sup> In accordance with the provisions of Sub-title III, of Title III of the Second Schedule of the Civil Code, Cap. 16 of the Laws of Malta

<sup>13</sup> In terms of the Trusts and Trustees Act, Cap. 331

<sup>14</sup> In terms of the Securitisation Cell Regulations, Subsidiary Legislation 386.16

<sup>15</sup> Cap 386 of the Laws of Malta

opting to offer their securities without listing or trading such on a trading venue<sup>16</sup> to benefit from DLT.

Other amendments which may be required to allow and facilitate the issuance of securities in tokenised form include Article 118 (Transfers of Shares and Debentures), Article 120 (Issue of Certificates), Article 122 (Pledging of Securities), Article 124 (Register of Debentures), Article 126A (Proper keeping of register in certain instances).

For the purpose of this document, it will be assumed that the Companies Act will be amended to allow and facilitate the issuance of securities in tokenised form.

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*Q2. Do you agree with the Authority's approach to limit Traditional STOs to companies?*

*Q3. Do you agree with the need to amend certain provisions of the Companies Act? Would you consider further provisions in the Companies Act to be problematic for Traditional STOs?*

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## **2.3 Three-Pillar Assessment**

Once the Authority is presented with an application for an approval of a prospectus and/or application for authorisation for admissibility to listing, **the MFSA will carry out an assessment of an applicant's Financial Soundness; Corporate Governance and compliance with Transparency requirements.** This assessment is the same evaluation criteria adopted for general applications for authorisation for admissibility to listing.

Where a Traditional STO Issuer would like to offer securities to the public without a listing on a Regulated Market, it shall follow the rules applicable to public offers.<sup>17</sup>

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<sup>16</sup> The term 'trading venue' includes Regulated Markets, MTFs and OTFs

<sup>17</sup> The Authority is currently revising the rules applicable to public offers to implement the Prospectus Regulation.

## 2.4 *Financial Soundness*

When evaluating the financial soundness of a prospective issuer at application stage, the MFSA would **assess the issuer's solvency. In terms of the current listing regime, the review of an applicants' financial soundness** is generally based on historical financial information; through a historical track record of three financial years of operations, and through the review of the **Financial Due Diligence Report ('FDDR')**<sup>18</sup> in the case of a bond issue.

The Authority is mindful that STOs, like ICOs, are seen as an important alternative source of funding by start-up companies<sup>19</sup> which typically operate innovative business models. With this in mind, the Authority understands that the review of a Traditional STO application could be more demanding, in view of the lack of historical financial information and, in many cases, limitations on the availability of industry benchmarks.

Accordingly, in certain cases (e.g. start-up companies) the Authority would consider it necessary for the Issuer to draw up a FDDR. This should be applicable to all applicants seeking approval for admissibility to listing and trading of a Traditional STOs. The FDDR would put forward the business model of the applicant to the Authority for its consideration, against a defined set of parameters<sup>20</sup>. An explanation of the business model of the prospective issuer together with historical and/or projected financial information and/or additional security/guarantee would enable the Authority to be in a better position to assess the financial soundness of the applicant.

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Q4. *Do you agree with the requirement for certain issuers of STOs applying for admissibility to listing, to draw up a FDDR, regardless of the nature of the underlying security or asset?*

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## 2.5 *Corporate Governance*

The Authority expects the board of directors of a prospective issuer/offeree to acquire and maintain sufficient knowledge and understanding of the **issuer's business in its entirety, to enable it to discharge its functions in a diligent manner.**

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<sup>18</sup> As described in the Listing Authority Policies, specifically Section II - Financial Soundness of Applicants for Admissibility to Listing. The SMSU is currently working on updating the existing policy to ensure that this would widen its scope to encompass all Issuers of transferable securities.

<sup>19</sup> Between January 2017 and January 2019, the capital raised through initial coin offerings and private tokens amounted to 24 billion euro globally. – Speech by Vice-President Dombrovskis at the Eurofi High-level Seminar 2019 – Bucharest, Romania

<sup>20</sup> The Authority is currently in the process of revising its FDDR Policy to significantly bolster the section relating to financial projections

This general requirement which presently applies to all issuers/offers is also relevant to issuers/applicants of Traditional STOs, given that this depends on the exigencies of the business model of the particular issuer/offers rather than the type of securities being issued/offers.

Where the board of directors is also responsible for the innovative technology arrangements underpinning the storage and transaction in the securities, the following requirements should apply:

- i. The Cyber-Security Framework and IT Infrastructure Requirements<sup>21</sup> set out in the Virtual Financial Assets Act<sup>22</sup> should be adhered to; and
- ii. A Systems Auditor<sup>23</sup> should be appointed in order to prepare a Systems Audit Report<sup>24</sup>. The Authority would recommend that the requirements relating to the Systems Audit set out in the Systems Auditor Guidelines issued by the Malta Digital Innovation Authority (“MDIA”), be applied.

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Q5. *Do you agree with the additional corporate governance requirements being recommended for Traditional STOs?*

Q6. *Do you agree with the requirement of a Systems Audit? If not, what alternative measures for testing and verifying the integrity of the system would you suggest?*

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## 2.6 *Transparency Requirements*

The Prospectus Regulation requires that transferable securities shall only be offered to the public in the European Union and/or admitted to trading on a regulated market situated or operating with the European Union, after prior publication of a prospectus in accordance with the Regulation (unless it would fall under a specific exemption in terms of the same Regulation).

In the event that an issuer/offers would like to offer and/or list a Traditional STO on a Regulated Market in Malta and Malta is deemed as the Home Member State in terms of the Prospectus Regulation, that issuer/offers would need to submit a prospectus to the Authority for its approval.

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<sup>21</sup> The Virtual Financial Assets Rulebook, Chapter 2, Section 7, provides that the Issuer shall ascertain that its IT infrastructure ensures: the integrity and security of any data stored therein; availability, traceability and accessibility of data; and privacy and confidentiality; and is in line with the provisions of the GDPR.

<sup>22</sup> Chapter 590 of the Laws of Malta

<sup>23</sup> The Systems Auditor shall be registered with the Malta Digital Innovation Authority in line with the Innovative Technology Arrangements and Services Act, Article 9.

<sup>24</sup> The audit is to be conducted following the ISAE 3000 standard and is to be prepared in line with Part B – Systems Audit Report Guidelines, issued by the MDIA.

In such case the Authority would expect the Prospectus, in line with the Prospectus Regulation, to include all necessary information which is material to an investor for making an informed assessment of:

- a. The assets and liabilities, profits and losses, financial position, and prospects of the issuer and of any guarantor;
- b. The rights attaching to the securities; and
- c. The reasons for the issuance and its impact on the issuer.

This information may vary depending on any of the following:

- i. the nature of the issuer;
- ii. the type of securities;
- iii. the circumstances of the issuer;
- d. Where relevant, whether or not the non-equity securities have a **denomination per unit of at least €100 000 or are to be traded only** on a regulated market, or a specific segment thereof, to which only qualified investors can have access for the purposes of trading in the securities.

The Authority is of the opinion that the requirements of the Prospectus Regulation and the relevant Annexes are adequate for Traditional STOs and does not foresee any major issues in this respect.

In the case of Traditional STOs, the Authority expects the prospectus to include the relevant information, including pertinent risks associated with the technology arrangements which the applicant would have in place, and the investor safeguards embedded within any smart contracts being utilised.<sup>25</sup> Also, given the innovative aspect of such technology, the Issuer/Offeror is expected to include enough information regarding the Systems Audit, Cyber-Security Framework and the IT Infrastructure Requirements referred to under Section 2.5.

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<sup>25</sup> A specific risk factor relating to the securities on "Code Risk" should be included in the Prospectus. This would specifically state that it is possible that circumstances may arise where the DLT software may not always reflect the algorithm and features described in the prospectus. A statement to such effect should serve as a deterrent for investors blindly trusting the system being used.

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- Q7. *Do you agree that the Prospectus Regulation and the relevant Annexes are adequate in the case of Traditional STOs? If not, what alternative/additional requirements would you consider sufficient for an informed investment decision to be taken?*
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### 3 Additional ongoing obligations following an Offer and/or Listing and/or Trading of Traditional STOs

The Transparency and Ongoing obligations of a Company, including publication of financial information and inside information should not be impacted by the fact that such company is offering and/or listing and/or trading Traditional STOs. However, the Authority recommends that where the Company itself operates the underlying DLT, the Company is required to prepare annually a Type 2 Systems Audit as outlined in Section 2 of Chapter 01, titled 'Systems Auditor Role', Part A – Systems Auditor Guidelines, issued by the MDIA.

The Authority anticipates that given that a Company has to have one register of members, the scenario where the Company itself operates the underlying DLT, may only apply to Companies offering Traditional STOs to the public without listing, since listing and/or trading Traditional STOs on trading venues will trigger the requirement of a CSD.

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Q8. *Do you agree with the proposed additional requirement? If not, what alternative processes would you suggest to ensure proper controls of the system?*

Q9. *Do you agree with the Authority's expectation that companies operating their own DLT would be only companies offering Traditional STOs to the public, without seeking listing and/or trading of such Traditional STOs on trading venues?*

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## 4 Secondary Markets

Issuers of Traditional STOs might opt to admit the securities to trading on a market.

Trading venues create a market structure which induces liquidity in securities by allowing buyers and sellers to meet. Consequently, efficient trading venues are crucial in ensuring effective secondary markets. One of the main characteristics for trading venues is the price formation mechanism.

The characteristics of traditional market models vary widely. The European **Securities and Markets Authority** (“ESMA”) segregates these models into three: “(i) those that have a central order book and/or match orders under other trading models (ii) those whose activities are similar to those of brokers/dealers and (iii) those that are used to advertise buying and selling interests.”<sup>26</sup>

The organisational setup of trading venues is by and large regulated by national law since EU legislation, including MiFID II, does not contain exhaustive requirements relating to organisation requirements for trading venues.

Whereas traditional trading venues operate through a centralised exchange system, in the context of DLT, trading venues can be structured to operate and function in two different ways; a centralised exchange system or a decentralised exchange system.

In this respect, both exchange systems can employ DLT and cater for the issuance and trading of STOs. However, the interaction between market stakeholders differs between the two exchange systems.

### 4.1 *Centralised Exchange vs. Decentralised Exchange*

#### 4.1.1 *Centralised Exchange*

In a centralised exchange, transactions are carried out with the assistance of third parties and the daily operations are supervised by a central body. A centralised exchange is similar to traditional trading venues.

A centralised exchange employing DLT would mean that the trading venue holds an inventory of the securitised tokens, which inventory is obtained from the DLT and throughout the trading activity, all tokens remain on the trading venue.

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<sup>26</sup> ESMA Advice on Initial Coin Offerings and Crypto-Assets (9 January 2019)

A majority of centralised exchanges keep custody of the tokens<sup>27</sup> while a minority of centralised exchanges let users control the keys to the crypto assets<sup>28</sup>. However, new variants of centralised exchanges are allowing clients to have custody of the tokens. Trading venues store private keys either on a server connected to the internet, or on a device which is not connected to the internet. The majority of private keys are stored on devices which are disconnected from the internet in order to prevent the risk of theft<sup>29</sup>. Hot wallets are connected to the internet while cold wallets are not. Software wallets are usually hot wallets, while hardware wallets tend to be cold wallets, although there may be some variations.

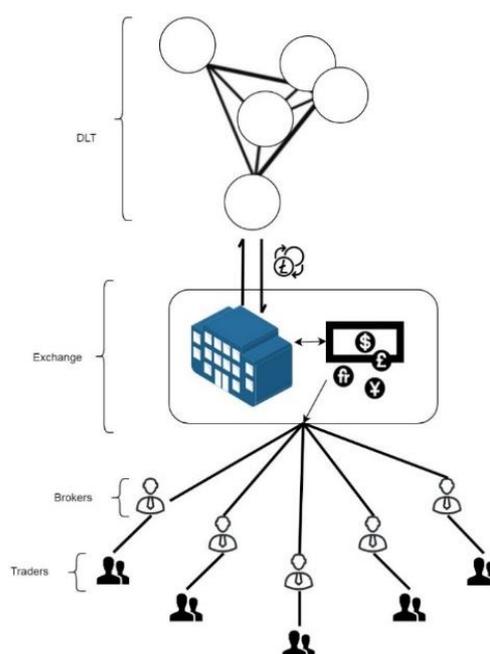


Figure 1: Centralised Trading Platform

#### 4.1.2 Decentralised Exchange

A decentralised exchange consists of multiple users connected to each other, whereby each user would have the same copy of the ledger, thus forming a distributed ledger. In a decentralised exchange, assets are traded in a peer-to-peer<sup>30</sup> manner, automatically. When a new transaction takes place, the ledger is updated following a consensus. As opposed to a centralised environment, the tokens are not held by a central party (the trading venue), but are held by the user. The user has the option to keep the assets saved either on a server which is connected to the internet, or on a disconnected device.

<sup>27</sup> Nathan Sexer, 'State of Decentralized Exchanges' (Consensys, 31 January 2018)

<sup>28</sup> Dr Garrick Hileman and Michel Rauchs, "Global Cryptocurrency Benchmarking Study" (2017)

<sup>29</sup> Nicolas Bacca, 'How to properly secure cryptocurrencies exchanges' (Ledger, 8 August 2016)

<sup>30</sup> In the trading context, going peer-to-peer means having participant buy and sell assets directly with each other, rather than working through an intermediary or third party service.

Decentralised environments can be classified into permissioned and permission less. In a permissioned decentralised environment, permission has to be given to the user before that user can connect to the chain<sup>31</sup>. Once permission is given to the user, the user would then be able to connect to the chain.

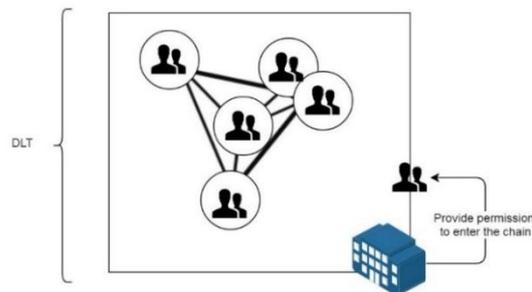


Figure 2: Permissioned Decentralised System

On the other hand, permission is not needed when connecting to a permission-less chain. The only control there is on a permission-less chain is the consensus given to approve a transaction to take place on the chain.

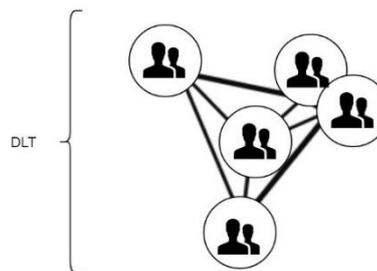


Figure 3: Permission-less Decentralised System

#### 4.1.3 Direct Electronic Access

An issue concerning both centralised and decentralised exchange systems is the direct access to electronic facilities and financial order books. MiFID II specifies that Direct Electronic Access (“DEA”) refers to an arrangement where a member, participant or client of a trading venue permits a person to use its trading code to electronically transmit orders relating to a financial instrument directly to the trading venue, and includes arrangements which involve the use by a person of the infrastructure of the member or participant or client<sup>32</sup>.

In general, DEA can be either intermediated or non-intermediated<sup>33</sup>. Intermediated DEA occurs through either an automated order routing (AOR) system or sponsored access (SA). In an AOR, an intermediary, normally a

<sup>31</sup> In a permissioned DLT, someone has to grant permission to users who want to access the system. This can be achieved in various ways, one way being by having a central authority that provides such permission. An example of such consensus would be proof of authority.

<sup>32</sup> Directive 2014/65/EU on markets in financial instruments, Article 4(41)

<sup>33</sup> Technical Committee of the International Organization of Securities Commissions, ‘Principles for Direct Electronic Access to Markets’ (International Organization of Securities Commissions 2010).

market member of the exchange, grants customers to transmit their orders electronically on its infrastructure, which are subsequently transmitted for **execution on the market under the intermediary's trading identification code**. Additionally, in a SA, the intermediary provides its customers with a trading identification code to directly transmit their orders on the exchange.

Conversely, non-intermediated DEA occurs when a person who is not licenced as an intermediary, such as a collective investment scheme, obtains a market membership **and connects directly to the market's trading system** similar to the other member intermediaries through its own market infrastructure and member identification code.

However, Article 48(7) of MiFID II specifies that, trading venues should only grant permission to members or participants to provide DEA if they are investment firms authorised under MiFID II or credit institution authorised under Directive 2013/36/EU<sup>34</sup>. Therefore, non-EU firms, including firms licenced in an equivalent jurisdiction, or EU firms without a MiFID II licence cannot provide DEA to their clients<sup>35</sup>. Consequently, in terms of the requirements contained in MiFID II, DEA should be intermediated.

In this respect, the Authority proposes that, for the scope of Traditional STOs, a decentralised system needs to be permissioned, allowing intermediaries with a MiFID II licence to be the users of the chain and provide direct electronic access for the DLT to their clients as shown in the below diagram.

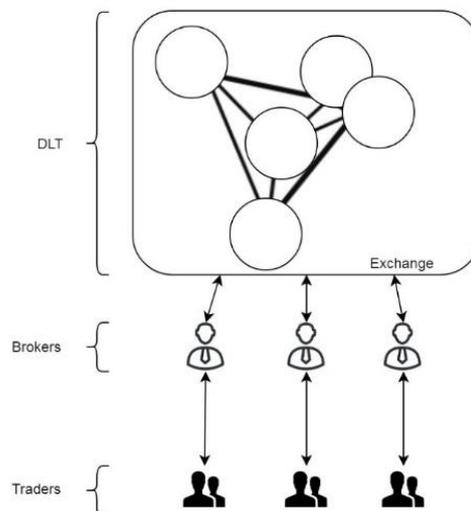


Figure 4: Decentralised System with Brokers

<sup>34</sup> Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.

<sup>35</sup> ESMA Questions and Answers on MiFID II and MiFIR market structures topics, Question 25 (European Securities and Markets Authority 2019)

## 4.2 *Transaction Reporting*

In terms of Article 26 of MiFID II, investment firms which execute transactions in financial instruments and operators of a trading venue, shall report complete and accurate details of transactions in financial instruments to the competent authority as quickly as possible, and not later than the close of the following working day.

As explained previously, a centralised exchange is operated and controlled by a centralised body whereby the main market participants are investment firms with a MiFID II licence, who provide direct electronic access for the DLT to their clients. Thus, the obligation on trading venues and investment firms to report transactions to the Authority still remains.

In a permissioned decentralised DLT, investors should also execute transactions through an investment firm. Similar to the centralised chain, investment firms would be required to report any trades performed by them or on their behalf to the competent authority.

In view of the fact that in a permission-less decentralised DLT, investors can execute transactions on the chain without the intervention of an investment firm, there are challenges in ensuring proper adherence with MiFID/MiFIR transaction reporting requirements. In this respect the Authority is of the opinion that it would be difficult to apply a permission-less decentralised DLT in the case of Traditional STOs.

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- Q10. *Do you agree that a permission-less decentralised exchange could pose difficulties in ensuring compliance with the transaction reporting requirements contained in MiFIR?*
- Q11. *Do you agree that Traditional STOs should be traded on either a centralised exchange via investment firms (with the possibility of investment firms granting direct electronic access) or on a decentralised exchange with investment firms granting DEA?*
- Q12. *From the general findings, it appears that a trading platform operating a permission-less decentralised exchange will pose various difficulties from a regulatory point of view. Would you agree? How do you believe that such difficulties can be overcome?*
- Q13. *To what extent do you believe that a centralised trading platform or a decentralised but permission based trading platform (hybrid) would work in practice?*
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## 5 Market Abuse Regulation

The main scope of Regulation (EU) 596/2014 on Market Abuse ('MAR') is to safeguard market integrity, which is a fundamental requirement for an integrated, efficient and transparent financial market. The smooth functioning and public confidence in financial markets are prerequisites for economic growth and wealth.

MAR applies to financial instruments admitted to trading on a regulated market or for which a request for admission to trading on a regulated market has been made; financial instruments traded on a Multilateral Trading Facility ('MTF'), admitted to trading on an MTF or for which a request for admission to trading on an MTF has been made; financial instruments traded on an Organised Trading Facility ('OTF'); or financial instruments the price or value of which depends on or has an effect on the price or value of a financial instrument, including, but not limited to, credit default swaps and contracts for difference.

### 5.1 *Prohibitions under MAR*

Market Abuse is considered a hindrance to market integrity and is a concept that encompasses unlawful behaviour in the financial markets. For the purposes of MAR, it is understood to consist of insider dealing, unlawful disclosure of inside information and market manipulation.

#### 5.1.1 *Insider Dealing*

Insider dealing arises in the event that a natural or legal person is in possession of inside information and makes use of this information in order to acquire or dispose of financial instruments to which such information relates. This practice includes also cancellations or amendments made to an order relating to a financial instrument that is placed prior to obtaining the information and to which the information relates, in accordance with Article 8(1) of MAR.

#### 5.1.2 *Unlawful Disclosure of Inside Information*

This occurs where a natural or legal person is in possession of inside information and reveals this information to another person, excluding when such disclosure is done in the normal exercise of an employment, a profession or duties in terms of Article 10(1) of MAR.

#### 5.1.3 *Market Manipulation*

Market manipulation involves a deliberate attempt to affect the market operations and in so doing create a false and misleading appearance of the price or market relating to the financial instrument. Engaging and attempting to engage in behaviour that ultimately manipulates the market are both

prohibited under MAR. Market manipulation can comprise of various activities. A non-exhaustive list of these activities are set out in Article 12(1) of MAR.

## **5.2** *Implications under the Market Abuse Regulation*

### **5.2.1** *Trading Venues*

Since MAR would be applicable to Traditional STOs, and provided they are traded or admitted to trading on a trading venue (or, where they are not traded on a trading venue, their price or value depends or has effect on the price or value of a financial instrument traded on a trading venue), market operators operating such trading platforms/venues would need to have in place effective arrangements, systems and procedures aimed at preventing, detecting and reporting market abuse in terms of Article 16 of MAR.

### **5.2.2** *Issuers*

Furthermore, issuers of Traditional STOs would have to fulfil their obligations under MAR, including inter alia, disclosing inside information<sup>36</sup> as soon as possible; managers would need to notify the MFSA of every transaction conducted on their own account or by closely associated persons<sup>37</sup>; and persons who produce or disseminate investment recommendations would also need to adhere to specific requirements.

## **5.3** *Risks to Market Integrity*

### **5.3.1** *Lack of Transparency*

As highlighted by ESMA, important issues linked to with market integrity include whether pre- and post-trade information made available by the platform on which the security token is being traded, would be sufficient to support market efficiency, fair and orderly trading and whether the platform has adequate rules, surveillance and enforcement mechanisms to deter or detect potential market abuse<sup>38</sup>.

More specifically, in order to monitor trading, identities of parties involved in a transaction need to be known and verified. One would therefore need to establish whether the level of transparency in security tokens transactions would suffice for market monitoring purposes.

### **5.3.2** *Security Tokens and Market Abuse*

*A number of factors could make Security Tokens vulnerable to market abuse:*

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<sup>36</sup> Regulation (EU) 596/2014 on Market Abuse (MAR), Article 18

<sup>37</sup> *ibid.* Article 19

<sup>38</sup> ESMA, Initial Coin Offerings and Crypto-Assets, 9 January 2019, ESMA50-157-1391

*i. Centralised Vs Decentralised trading systems*

In decentralised systems, there may be lack of clarity as to the identity of the market operator - hence, it could be difficult to determine who is responsible for ensuring compliance with certain requirements of MAR, including for instance, the obligation of market operators to have effective arrangements, systems and procedures aimed at preventing and detecting market abuse.

Decentralised exchanges could be more prone to abuse behaviour. For instance, since the network in a decentralised exchange would be public, anyone can check planned orders; this could give rise to front-running. Once an order which has been placed on a decentralised exchange is identified, there can be front-running by placing the same order, resulting in the first order never being executed.

*ii. Permissioned Vs Permission-less trading systems*

In a permission-less system, investors could access trading platforms directly, without an authorised intermediary being involved. This raises concerns as to whether such trading systems are in a position to effectively conduct appropriate checks.

It is our understanding that a permissioned system could enhance privacy of investors, enables KYC checks and increases operational efficiency. A permission-less system could be more difficult to supervise from a market abuse perspective. Although the removal of intermediaries is usually seen as a huge advantage of distributed ledger technology, there are some disadvantages which will invariably come along with security tokens.

Removal of intermediaries would mean that certain requirements which MAR imposes on investment firms (such as for instance, the requirement to have systems and arrangements to detect and prevent market abuse and the requirements to submit suspicious orders and transaction reports (STORs)) cannot be enforced. This might imply that such requirements may have to be somehow shifted onto the buyer or the seller in the transaction.

The Crypto-assets Taskforce<sup>39</sup> in the UK has reported evidence of market abuse activities common in traditional financial instruments including pump and dump<sup>40</sup>, spoofing<sup>41</sup> and wash trades<sup>42</sup> already occurring in crypto-assets

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<sup>39</sup> HM Treasury, Financial Conduct Authority, Bank of England, Cryptoassets Taskforce: Final Report (2018) <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752070/cryptoassets\\_taskforce\\_final\\_report\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf)> accessed on 7 February 2019.

<sup>40</sup> Pump and Dump is a scheme whereby the price of a financial instrument is inflated through false or misleading statements. The persons behind such a scheme would have already established a position in this financial instrument and sell their position after such recommendations lead to a higher price of the financial instrument.

<sup>41</sup> Spoofing consists of a person who places a large buy or sell order, with no intention of executing this order. This order is solely made to create an artificial impression of high demand for this financial instrument. Concurrently, the person places a large number of small orders for the same financial instrument to profit from the increase in price generated by the large order which was subsequently cancelled.

<sup>42</sup> Wash trading entails buying and selling a financial instrument in with the intent of feeding misleading information to the market.

markets. Being a very innovative market, new forms of market abuse behaviours which are not yet identified within traditional markets, may arise. These factors could significantly damage market confidence and undermine investor protection whilst preventing Security Tokens from operating efficiently.

ESMA has also noted that:

*“Some new abusive behaviours may arise which are not directly captured by MAR or current market monitoring arrangements. For example, new actors may hold new forms of inside information, such as miners and wallet providers, which could potentially be used to manipulate the trading and settlement of crypto-assets.”<sup>43</sup>*

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- Q14. *What are your views regarding transparency/transaction reporting and prevention of financial market abuse? Do you agree that the prevention of financial market abuse is intrinsically dependent on transaction reporting?*
- Q15. *Are you of the view that decentralised exchanges pose risks to market integrity?*
- Q16. *Do you agree that in order to safeguard market integrity, Traditional STOs should only be traded on centralised exchanges?*
- Q17. *Do you agree that permissioned systems allow for enhanced investor protection?*
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<sup>43</sup> European Securities and Markets Authority, 'Advice: Initial Coin Offerings And Crypto-Assets' (2019) <[https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391\\_crypto\\_advice.pdf](https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf)> accessed 8 February 2019.

## 6 Post-Trade Settlement

### 6.1 *Operational Constraints*

Any issuer established in the Union that issues or has issued transferable securities which are admitted to trading or traded on trading venues, shall arrange for such securities to be represented in book-entry form as immobilisation or subsequent to a direct issuance in dematerialised form. Where a transaction in transferable securities takes place on a trading venue the relevant securities shall be recorded in book-entry form in a CSD on or before the intended settlement date, unless they have already been so recorded<sup>44</sup>.

The Central Securities Depositories Regulation<sup>45</sup> ('CSDR') defines a CSD as 'a legal person that operates a securities settlement system' and provides at least one of the following two services:

- i. Initial recording of securities in a book-entry system ('notary service');  
or
- ii. Providing and maintaining securities accounts at the top tier level ('central maintenance service')

Consequently, a securities settlement system ('SSS') is a formal arrangement between three or more participants<sup>46</sup> with common rules and standardised arrangements for the execution of transfer orders between the participants; governed by the law of a Member State chosen by the participants; and designated, without prejudice to other more stringent conditions of general application laid down by national law, as a system and notified to the Commission by the Member State whose law is applicable, after that Member State is satisfied<sup>47</sup>.

Therefore, should the operator of the DLT meet the criteria mentioned in the definition above, it would be required to seek authorisation as a CSD, in terms of the CSDR. Such an authorisation might give rise to a number of implications.

For instance, the participation in the DLT would be limited to credit institutions, investment firms, public authorities, publicly guaranteed undertakings, central counterparties, settlement agents or clearing houses. Such requirement might be challenging for DLTs when settling financial instruments given that participation in existing DLTs in the crypto currency

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<sup>44</sup> CSDR Article 3(1) and Article 3(2)

<sup>45</sup> Regulation (EU) No 909/2014 Of The European Parliament And Of The Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012 ('CSDR')

<sup>46</sup> Participant 'shall mean an institution, a central counterparty, a settlement agent or a clearing house', Directive 98/26/EC Of The European Parliament And Of The Council of 19 May 1998 on settlement finality in payment and securities settlement systems ('SFD'), Article 2(f)

<sup>47</sup> Directive 98/26/EC Of The European Parliament And Of The Council of 19 May 1998 on settlement finality in payment and securities settlement systems ('SFD')

sphere is predominated by individuals. Such a requirement implies that a DLT could not be permission-less given the SSS participation restriction.

In the event that the DLT does not qualify as a SSS, a DLT might still qualify as a settlement internaliser<sup>48</sup> under the CSDR. In this event, a settlement internaliser would be required to report to the Authority on a quarterly basis the aggregated volume and value of all securities transactions that are settled outside a SSS. It is imperative to note that the SFD would not apply in such cases, and consequently investors would not benefit from the safeguards that the SFD provides. One might wish to note that the SFD guarantees that transfer orders which enter into the SSS are also finally settled, regardless of whether the sending participant has become insolvent or transfer orders have been revoked in the meantime.

Should a DLT qualify as a settlement internaliser, it is understood that other practical processes have to be taken into consideration. For instance, when ensuring the integrity of the issue, the Authority is of the opinion that a person should be responsible for ensuring that the number of securities initially created when the security was issued should equal to the total number of securities in circulation at any time.

Another practical consideration to be taken into consideration might be in relation to safekeeping of securities, particularly when considering the management of the rights and obligations linked to the securities holdings such as dividend and interest payments or voting rights in the case of shares. It would be beneficial to understand who would be processing such corporate actions.

## 6.2

### *Legal Certainty*

Apart from the operational and settlement certainty, another key area that should be tackled is legal certainty in terms of what governing law should apply given that the participants in the DLT may be dispersed across multiple jurisdictions.

In a paper published jointly by Euroclear and Slaughter & May<sup>49</sup> the concerns surrounding legal certainty have been clearly prescribed. The CSDR grants open access requirements that give issuers the right to passport their publicly-traded securities to be recorded by any CSD within the European Union, nonetheless the regulation under which the securities are established continue to apply. With that being said, it is advisable that with securities in digital form, conflicts in relation to governing law should be addressed at DLT level rather than at the level of individual security accounts. Generally across

<sup>48</sup> Settlement internaliser “means any institution, including one authorised in accordance with Directive 2013/36/EU or with Directive 2014/65/EU, which executes transfer orders on behalf of clients or on its own account other than through a securities settlement system”

<sup>49</sup> Blockchain settlement regulation, innovation and application, November 2016  
<<https://www.euroclear.com/dam/PDFs/Blockchain/MA3880%20Blockchain%20S&M%209NOV2016.pdf>> Accessed 14<sup>th</sup> February 2019

European securities legislation, PRIMA<sup>50</sup> (place of the relevant intermediary approach) is adopted to resolve issues of conflicting laws in securities settlement. PRIMA provides that in such cases, the governing law is the law of the securities account to which the relevant securities are credited. Conversely however, PRIMA runs into difficulty in a fully disintermediated system due to the lack of relevant intermediaries.

Accordingly, Article 9 of the SFD provides that where securities are legally recorded on a register, account or central deposit system located in a member state, the determination of rights of such entities as holders of collateral security in relation to those securities shall be governed by the law of that member state. However, when the location of the securities register is stored on a DLT i.e. the location of the register stored at every node, the location according to the directive does not apply, nor does the PRIMA concept.

In light of this, the central authority being the CSD would be the natural candidate to act as an anchor to governing law. The location of the securities ledger is irrelevant as it is located at each node, however, the CSD would need to be the ultimate authority responsible for the coding and operation of the DLT.

Alternatively, upon registration for active participation in the DLT, participants would be required to sign up to a particular governing law which allows the CSD to choose the law of the jurisdiction in which its operating platform is based.

### 6.3 *Securities Account*

The provision and maintenance of securities accounts at top tier level (**‘Central maintenance service’**) is one of the core functions of a CSD in terms of the Central Securities Depository Regulation, however, this becomes debatable under a system operated on DLT.

The aforementioned paper details this concern thoroughly. Inter alia the paper mentions that a DLT system does not compromise the ability to provide personalised information to account holders, provided that such investors have been specifically identified in the DLT. In theory, holdings recorded on a distributed ledger collectively do form a securities account, however, it is fundamental that the record created by the account provider (**i.e. the CSD**) is the **‘golden record’ with priority and control** over any other records created by other nodes (participants) so as to manage such participants in event of default or in execution of court orders in relation to assets held under account.

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<sup>50</sup> The Hague PRIMA (Place of Relevant Intermediary Approach) Convention was adopted on 13 December 2002. Under this convention, the law governing a cross-border security transaction will be that of the jurisdiction where the intermediary maintaining the account to which the securities are credited is located. This may be apparent in the **agreement between the parties. If not, the law of the location of the intermediary’s office applies. Otherwise the law of the place of incorporation/organisation of the office applies.**

The said paper provides a solution to the above where CSDs download data from the DLT at pre-defined intervals and store them at the relevant legal node. This notion can be adopted through the use of a forensic node where it receives and/or synchronise all of the data recorded within the distributed ledger as other nodes. One should also keep in mind the requirements of the Companies Act, which require the companies to have one register of members.

Q18. *What are your views in relation to the extent of applicability of the CSDR? Do you think that the legal requirements relating to settlement could possibly impede the application of DLT?*

Q19. *Do you agree that the CSDR implicitly implies that a centralised concept is required? If not, how could a decentralised concept be adopted to ensure adherence with the CSDR requirements?*

Q20. *To what extent do you believe that DLT would be used for settlement purposes? Do you believe that settlement is an integral part for a DLT system to succeed, or would a central maintenance service / notary service be sufficient?*

Q21. *What are your views in relation to a DLT operating a settlement internaliser activity? In the event that settlement is carried out through a settlement internaliser rather than a CSD, how would the systemic risk associated with participation in payment and securities settlement systems be reduced<sup>51</sup>?*

Q22. *In instances where a DLT would be operating as a settlement internaliser, who is expected to ensure the integrity of the issue? Similarly, who would be considered to be responsible with respect to safekeeping of securities and the management of the rights and obligations related to such securities?*

Q23. *What are your views in relation to the notion of legal certainty discussed in paragraph 6.2? How can this uncertainty be mitigated or clarified?*

Q24. *What are your views on the issues highlighted under section 6.3 relating to securities accounts? Such views should also consider instances where the DLT arrangements are acting as settlement internalisers.*

<sup>51</sup> Directive No 98/26/EC on settlement finality aims at reducing the systemic risk associated with participation in payment and securities settlement systems, and in particular the risk linked to the insolvency of a participant in such a system.

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