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| 2 June 2016 | ESMA/2016/773 RF |

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| Reply form for the Discussion Paper on the Distributed Ledger Technology Applied to Securities Markets  |
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| Date: 2 June 2016ESMA/2016/773 RF |

Responding to this paper

The European Securities and Markets Authority (ESMA) invites responses to the specific questions listed in the ESMA Discussion Paper on the Distributed Ledger Technology (DLT) Applied to Securities Markets, published on the ESMA website.

*Instructions*

Please note that, in order to facilitate the analysis of the large number of responses expected, you are requested to use this file to send your response to ESMA so as to allow us to process it properly. Therefore, ESMA will only be able to consider responses which follow the instructions described below:

* use this form and send your responses in Word format (pdf documents will not be considered except for annexes);
* do not remove the tags of type <ESMA\_ QUESTION\_DLT\_1> - i.e. the response to one question has to be framed by the 2 tags corresponding to the question; and
* if you do not have a response to a question, do not delete it and leave the text “TYPE YOUR TEXT HERE” between the tags.

Responses are most helpful:

* if they respond to the question stated;
* contain a clear rationale, including on any related costs and benefits; and
* describe any alternatives that ESMA should consider

**Naming protocol**

In order to facilitate the handling of stakeholders responses please save your document using the following format:

ESMA\_DLT\_NAMEOFCOMPANY\_NAMEOFDOCUMENT.

E.g. if the respondent were XXXX, the name of the reply form would be:

ESMA\_DLT\_XXXX\_REPLYFORM or

ESMA\_DLT\_XXXX\_ANNEX1

***Deadline***

Responses must reach us by **2 September 2016.**

All contributions should be submitted online at [www.esma.europa.eu](http://www.esma.europa.eu) under the heading ‘Your input/Consultations’.

***Publication of responses***

All contributions received will be published following the end of the consultation period, unless otherwise requested. **Please clearly indicate by ticking the appropriate checkbox in the website submission form if you do not wish your contribution to be publicly disclosed. A standard confidentiality statement in an email message will not be treated as a request for non-disclosure.** Note also that a confidential response may be requested from us in accordance with ESMA’s rules on access to documents. We may consult you if we receive such a request. Any decision we make is reviewable by ESMA’s Board of Appeal and the European Ombudsman.

***Data protection***

Information on data protection can be found at [www.esma.europa.eu](http://www.esma.europa.eu) under the headings ‘Legal notice’ and ‘Data protection’.

# Introduction

Please make your introductory comments below, if any:

<ESMA\_COMMENT\_DLT\_1>

AFTI, “Association Française des Professionnels des Titres”, is the leading association representing the post-trade businesses in France and Europe. AFTI represents through its 99 members a wide range of activities: market infrastructures, custodians, account-keepers and depositaries, issuer services, reporting and data management services with staff 28,000 people in Europe of which 16,000 in France. Our members account for 26 % of the European custody activity with 55,600 billion € in safekeeping and 25 to 30% of the European fund asset servicing sector (namely depositaries and fund administrators). The French market infrastructures main figures are 29 millions of settlements ( CSD) and 186 millions of operations cleared in 2014 (CCP) .

The “*raison d’être*” of post-trade processes is, in essence, to enable interactions between issuers and investors. This relies on market infrastructures and intermediaries entrusted of specific functions, at each level of the value chain, such as CCPs for clearing, CSDs for settlement and custodians for custody core and ancillary services. Assets and Investors protection depends on the post-trade processes, including compliance with all regulatory requirements. A holistic approach of the whole post trade value chain is therefore necessary when considering potential adoption of the DLT technology, since fluidity and safety all along the process are the major objectives of the existing set-ups.

AFTI is of the opinion that intermediaries play a key role when protecting-investors, mitigating counterparty risk, ensuring market disciplines; and ultimately preserving financial stability while enabling financing real economy. When considering the potential use of the blockchain and DLTs in post-trade activities, preservation of the protection and stability for end-investors should be a key priority, taking into consideration that the technology remains largely untested with partial knowledge of related risks factors

DLT in securities markets would need to be restricted / permissioned with identified and regulated operators and defining a robust governance is the sole option to insure the implementation of the DLT in that area. In this respect, stakeholders have to frame a double level of governance. First, defining the role of each operator in the DLT system through multi-layer governance. Second, defining a regulation of operators and nodes, submitted to specific obligations and rules, and prudential rules.

Executive Summary:

* Legacy systems are already highly performing and resilient and in line with the highly demanding regulatory principles defined in recent years
* Applications of the DLT promise to disrupt the entire structure of securities markets, but, at this stage, a lot remains to be defined: structure, governance and even the technology itself which is largely untested
* An in-depth analysis is required in order to adapt current systems as well as regulatory frameworks and their requirements.
* Determining the governance model is the key of a DLT broad adoption, which demands a foresight approach for the implantation a completely new system.
* The main market and regulators objectives for financial stability and protection of investors and assets should not become at risk.
* Practically, implementation will have to be in line with investment cycles of securities markets infrastructures and systems.

<ESMA\_COMMENT\_DLT\_1>

##### Do you agree with the list of possible benefits of the DLT for securities markets? Please explain, e.g., are these benefits unique to the DLT, are some more important than others, are some irrelevant?

<ESMA\_QUESTION\_DLT\_1>

AFTI agrees with the possible benefits of the DLT for securities markets as identified by ESMA although some of them need to be qualified.

Benefits may be significant when recording of ownership and safekeeping of assets, reporting and oversight, reduction of counterparty risk, and efficient collateral management. However, this implies that stakeholders agree upon a set of similar rules and standards as processes, communication and protocols are concerned.

We also value as an important benefit the possibility for the regulator to access directly the trading data by banning intermediaries.

We agree with point 21 regarding the need of relying on CCPs in derivatives trades due to their prominent role in maintaining derivatives portfolios, managing risks and accordingly margin calls and collateral posted during the trade lifecycle.

Improvement of corporate actions processing due to Smart Contracts implementation is a major DLT opportunity.

Potentially DLT could also support reporting requirements in area of company ownership and voting rights.

However, the financial markets in general and the post trade in particular have been in constant evolution for years. Recent legislative initiatives have had already a significant impact on the current functioning of capital markets. The current regulatory framework is based on the traditional structure of financial markets thus the recourse to DLT might lead in parallel to a significant review of the latter:

1. Price discovery may no longer result from over the counter trading (save for some exceptions) and therefore securities must be traded on trading platforms.
2. When a security is traded on a trading platform, it must be issued with a CSD (which excludes DLT for the time being).
3. CSD obligation to hold securities accounts for their participants (central custody function), makes mandatory use of securities accounts, at least at the CSD level.
4. Almost all if not all EU Member State’s national legislation is based on securities being held in securities accounts.

In theory and from a practical perspective, DLTs could enable issuance directly in the distributed ledger with investors recording directly their securities in this ledger. Transfers could also take place in the distributed ledger. As a consequence, CSDs, CCPs and securities accounts would no longer be required. The entire structure of the current financial markets would therefore undergo a complete operational, technical and legal transformation and would be fundamentally transformed. In our view:

* Processing securities issuance, holding and transfer procedures are for the time being hardly implementable with the existing DLT technology that is far from being able to process the high volumes and to face the level of complexity in the current capital markets
* Issuing and holding securities should, if DLT is adopted, only take place in a permissioned DLT.

3.1 Clearing and settlement:

Regarding “speed” of transactions as mentioned in Point 11, AFTI is of the view that this should be addressed from a different perspective.

Settlement operations are already processed in real time and irrevocably on settlement date, without the recourse to DLTs. The fact that settlement takes place 2 days after the transaction is related to the pre – settlement adjustment phase including affirmation/confirmation of the terms of the transaction as well as controls or reconciliations required among the actors, from investors to intermediaries.

These steps aim at providing trust in the system and securing the overall processing in a context of high business volumes. The DLT could streamline the process and reduce the number of settlement instructions exchanged between multiple stakeholders, but settlement could hardly be instantaneous and securities markets will still need one or various third parties to ensure trust in the exchange system and to guarantee the settlement of a trade. Indeed even if the settlement instructions are in accordance with trade instructions, there is no guarantee that the buyer eventually pays the price and the seller delivers the securities; except if the respective balances have been checked prior to the order execution, which does not seem to be advisable considering the latency constraint.

Speed of settlement shall not be detrimental to the ratios of settlement efficiency on intended settlement date. Current level is excellent and shall remain as such in a DLT set-up.

DLT may improve clearing and settlement in the medium to long term. No precise schedule for DLT implementation seems, however, foreseen at this stage.

Should the clearing process be discontinued (i.e.: a settlement occurring almost simultaneously after the conclusion of the trade), the DLT would have to address side effects such as an increased number of settlement operations, at least for on-exchange transactions where there will be a settlement for each partial execution of the order.

Cash supplied to settle a given securities transaction is often available due to some previous secured lending activity. Gross settlement-real time would magnify the size of the secured lending markets by a considerable amount.

Indeed, the potential implications of real-time settlement on the cash side would have profound impacts on the functioning of global financial markets.

3.2 Record of ownership and safekeeping of assets:

Record of ownership and safekeeping of assets are definitely some areas where DLT could be envisaged as a solution to facilitate and make some processes more efficient. This would require a completely different approach as DLT would simplify and shorten the relationship between the issuer and the shareholders with no (or potentially reduced) presence of intermediaries (securities accounts could even become redundant). Such evolutions would, as previously mentioned, notably raise major regulatory and legal challenges as the ownership of shareholders currently stems from registration of transfers in the books of a centralized infrastructure and/or in the securities accounts opened in the books of an intermediary. In this new setup, roles of the various stakeholders and service delivery could significantly be transformed.

Moreover, even if smart contracts may appear as a promising solution in that context, they shall not put excessive limitations for issuers. Last but not least, DLT could not only make reconciliations more efficient, but also lead to their progressive disappearance as the DLT progresses in integrating the trading and post trading functions.

3.3 Reporting and oversight:

DLTs could be beneficial to reporting officers, risk managers and regulators, provided the necessary safeguards are in place. A sustainable security and privacy system should be built in the IT system and be an intrinsic part of it (i.e. before its implementation), to ensure that market actors and the system itself comply with the regulatory requirements (e.g. EMIR and MIFID).

Regulators would play a key role in the implementation of the DLT, which could alleviate the multiplication of stakeholders and controls simplify and disintermediate the access to information available in the DLT (see. questions 20 and 21).

3.4 Counterparty risk:

If securities were to be issued and registered in the distributed ledger and investors to hold their positions in the same distributed ledger, the entire paradigm of current financial markets infrastructures would virtually be subject to a change. Risks related factors would also be radically transformed. Additionally this technology may bring new risks beyond counterparty risk, and the ways and means to address them are largely unknown. It is therefore of the utmost importance that any future system ensures the same high level of security than the current legacy systems.

Regarding counterparty risk, AFTI is not in agreement with the statement that it would be eliminated with DLT. As explained above, except if the cash and securities balances are checked before the completion of the trade (see point 28 of the consultation), the counterparty risk would remain until the settlement of the transaction is completed. This fact advocates for the existence of a party or a system that guarantees the successful conclusion of the trade.

No solution appears, yet, able to ensure simultaneous settlement of cash and securities (DVP): therefore there would not only be a persistence of the counterparty risk but it would weight on the principal of the transaction, which is not the case currently.

CCP as central netting provider plays a fundamental role. This is obvious for derivatives admitted to central clearing, should the financial instrument be under a mandatory clearing or not, the CCP’s netting function should not be discontinued. Otherwise counterparties would have to face huge margin requirements.

As per the transactions on some derivative instruments, CCPs are (or will be) mandatory pursuant to the existing financial regulations, among other to mitigate counterparty risk, and this aspect of the financial markets seems to have been somewhat overlooked

3.5 Efficient collateral management:

The collateral needs can be reduced and the collateral management could be improved, it is unlikely that collateral needs could be eliminated even for spot transactions as the counterparty risk is not fully eliminated by the DLT. (See “counterparty risk” above). For these reasons, collateral management function should not be discontinued in any case.

In this respect, transfer of collateral is subject to the same changes as any change of ownership in securities, and collateral management solutions has to be considered through a DLT system.

3.6 Availability:

AFTI agrees with the statement in par. 3.6 of the consultation document. However, DLT systems proceed on a “continuous basis” and would need to interoperate with those external existing systems and infrastructures that, as far as they are concerned, do not work on a continuous basis, imposing d constraints on the DLT processing.

3.7 Security and resilience:

Current underlying technologies supporting DLT are perceived as highly secure, but are still largely untested. It is therefore difficult to assess resilience level of these technologies when applied to securities markets. We argue that:

* + In the coming years a high amount of small and diverging test-cases must be created that allow to determine precisely the risks that are inherent to DLTs and underlying technologies;
	+ Recovery plans should not be abandoned yet, even though we agree that DLT seems to contain intrinsically a contingency plan in its very structure as the ledger is multi-distributed.

Recent examples of “unexpected” outcomes from DLT implementations occurred. In some cases these have been qualified as “hacks”, but in reality the activities have been made possible using the specific features coded into the Smart Contracts. As such, it is not clear whether any crime has been perpetrated, or a misuse of one party in the network which led to outcomes that were significantly out of line with the reasonable expectations of the vast majority of users of the service.

Such circumstances, in the absence of a central “trusted” provider, illustrated the difficulty of amending the DLT infrastructure in response to vulnerabilities

3.8 Costs

First, markets need to have an advanced understanding of the potential solutions and their underlying technologies to make an estimate of the implementation costs of a solution in a specific context, especially when considering the core post trade functions. This is not yet the case.

Second, cost should be analyzed by post market stakeholders from an efficiency and security point of view, especially when targeting core post trading functions: they will have to determine if an investment in DLT is more effective than upgrading the current system or solution, and, when appropriate, where they can find one or more business segments with a high benefit/cost ratio to replace IT legacy systems hit by a technical and/or regulatory obsolescence.

Given the need to fully distribute the data on the DLT, it is likely that significantly more hardware would be needed for a large scale DLT implementation than for the current centralized infrastructures model. The more processing is required on each node of a DLT, the more this is likely to be the case.

<ESMA\_QUESTION\_DLT\_1>

##### Do you see any other potential benefits of the DLT for securities markets? If yes, please explain.

<ESMA\_QUESTION\_DLT\_2>

AFTI has identified various additional potential benefits for the securities markets. Many processes could be automated or simplified and the associated costs could be reduced significantly:

* + - * Auditing/Controls, as DLT could provide for auditable data, to be used by internal and external audits and regulators.
			* Client services: if banking institutions combine DLT with data analytics procedures, the DLT could provide a hub of information for clients that can have access to the entire lifecycle of the securities and portfolios. Especially regarding issuer services, we are of the opinion that the simplified and shortened relationship between the issuer and the investors that the DLT seems to promise is also one of the important benefits of this technology
			* DLT could well facilitate corporate actions processing and the organization of general meetings as well as asset servicing in general
* Claims on DLT assets could be documented,
* Proxies could be applied to all processes which could change the continued manual nature of the processes and the need to distribute & exchange information to and with a large number of underlying customers,

Potential benefits might also be uncovered for the investment funds industry. DLT might be implemented by register and asset registers in combination with AML/KYC DLT and may prove a beneficial tool for the fund industry specifically for transfer agents.

<ESMA\_QUESTION\_DLT\_2>

##### How would the benefits of the technology be affected, in the case where the DLT is not applied across the entire lifecycle of securities (i.e., issuance, trading, clearing and settlement, safekeeping of assets and record of ownership) but rather to some activities only?

<ESMA\_QUESTION\_DLT\_3>

In our view, full benefits from the DLT will emerge if implemented all along the value chain for core post trade activities and based on similar (if not the same) standards and protocols. This would notably avoid multiple reconciliations, maintenance of several databases and interoperability between different systems, sources of cost, risk and additional complexity.

DLT promises economies of scale achieved by allowing the transaction to serve simultaneously as agreement, settlement and regulatory reporting. Instead of building countless duplicative and redundant services, one record would be the source for information, eliminating the need for reconciliation and increasing the post-trade processing efficiency and security.

However, this scenario is hardly practicable at this stage for the reasons described in section 4 and 5 of the discussion paper. As a result most of stakeholders are currently investigating DLT for specific activities and segments, with the objective to rationalize highly manual or not-efficient processes.

For derivative markets, the most likely outcome is a partial DLT solution that provides efficiencies for record keeping and other notary functions, while the CCP entity itself remains in place for novation, risk management and default management processes.

<ESMA\_QUESTION\_DLT\_3>

##### Which activities (e.g., post-trading, other activities), market segments and types of assets in the securities markets are likely to be impacted the most by the DLT in your opinion? How is the DLT likely to modify the way securities markets operate? Please explain.

<ESMA\_QUESTION\_DLT\_4>

* Clearing

Clearing (as defined in EMIR level 1) means “the process of establishing positions, including the calculation of **net obligations**, and ensuring that financial instruments, cash, or both, are available to secure the exposures arising from those positions”. Immediate post trade settlement conflicts with the principle of netting.

Depending on how DLT is designed, the clearing function can be facilitated, reduced or made redundant. Consideration should be given to the type of assets (derivatives or securities) and to the nature of transactions (spots or securities financing transactions).

Considering derivative transactions, a DLT could be useful if it includes all the parties involved in the transaction, including the CCP which would ensure the same functions as today for cleared transactions. The main issue is the participation of the CCP in the DLT. The challenge is to ensure that allocation, novation and position closure functions would be available in such a future scheme. We agree with the comments in point 21. While it is true that there may be record keeping aspects of derivatives clearing that might benefit from DLT, the “term” (i.e. future) nature of derivatives, suggests that the likelihood of a full “DLT” solution replacing CCPs seems low.

Considering spot transactions, in a scenario where DLT replaces the traditional trading approach from trading to settlement, rules of the game will have to be completely reviewed. What is key to bear in mind is that under such a scenario even the settlement finality may be acknowledged differently than today. Nevertheless, as already mentioned, the counterparty risk would potentially remain and would have to be monitored in a way or another.

Considering securities financing transactions (SFT), it is true that as of today they are more and more entrusted to CCPs. In that area of business, as for derivatives, CCPs could participate to the DLT for processing open positions and managing risks until the maturity of the transaction.

* Settlement

Issues about speed must be addressed from a different perspective: Indeed, DLT could improve clearing and settlement, but it is yet too early to determine the level and nature of said improvement as speed is linked to the pre – settlement adjustment process (confirmation, affirmation and allocation of transactions).

* Custody (safekeeping of assets and record of ownership)

DLT could bring an innovative solution for the record of ownership based on a potentially simplified and shorter value chain than today. This presumes that the paradigm of financial market infrastructures changes. In such a new environment, roles of the various stakeholders could also be modified, but to what extent depending of the degree of intermediation that need to be maintained for safety and economic constraints?

* KYC/AML

This is worth analysing how further automation could allow to lower costs and minimize redundancy of processes. The accountability issue still need to be solved. The benefit for banking institutions could be expected within a given entity, among different entities of a same banking institution, and across banking institutions.

* Others

We also expect that derivatives, insurance contracts and some fixed income products may be prime target for DLT besides solutions for SMEs (access to funding, distribution of dividends, etc).

There could also be an opportunity for Investment funds (fully automated portfolios etc.) both on distribution and asset management. Issuance could be another key function but is likely to come in a second wave.

<ESMA\_QUESTION\_DLT\_4>

##### According to which timeframe, is the DLT likely to be applied to securities markets in your view? Please distinguish by type of activities, market segments and assets if relevant.

<ESMA\_QUESTION\_DLT\_5>

The financial industry is at an early stage of the DLT adoption process. “2016-2018" could be a period for limited scale but innovative “proof of concept” initiatives. We expect a period of 5 to 10 years before the distributed ledger platforms start to challenge incumbent post-trade infrastructures and existing securities processing, especially when cross – border implementation is considered. These timeframes are dependent upon (such as entities on the DLT system using the same, globally consistent market and reference data and standardised protocols). Last adapting regulatory framework will add further.

As explained in the introduction, the current obstacles are not only technical, but also of legal and regulatory nature. In order to implement DLT, considerable legal transformation are required. For instance until these are in fall, DLT can only be used for securities not listed on a trading platform, not in the scope of MiFID – MiFIR and not issued in a CSD. These limitations result in DLT being currently possible for a marginal part of assets only.

The implementation of the DLT entails an important investment in IT infrastructure, the availability of new skills and the development of innovative services. The ability to invest will depend on the point in the cycles of investment for each institution/group/industry: DLT could be welcome to replace obsolete technologies whilst economically not desirable where robust and efficient (and for some, newly implemented) systems are in operation. Post market stakeholders, however, are likely to identify some business segments with a high benefit/cost ratio where innovative technology may replace current systems with technical and/or regulatory obsolescence.

<ESMA\_QUESTION\_DLT\_5>

##### How might your organisation benefit from the introduction of the DLT?

<ESMA\_QUESTION\_DLT\_6>

N/A

<ESMA\_QUESTION\_DLT\_6>

##### If you are working on a concrete application of the DLT to securities markets please describe it (i.e., which activities, which market segments, which type of assets and for which expected benefits) and explain where you stand in terms of practical achievements in relation to your objectives.

<ESMA\_QUESTION\_DLT\_7>

Initiatives regarding the DLT are likely to be developed directly by AFTI members. AFTI, however, will offer to be instrumental, as a trade association, and provide for assistance and coordination of future common initiatives.

<ESMA\_QUESTION\_DLT\_7>

##### Do you agree with the analysis of the potential challenges? Please explain, e.g., are some more important than others, are some irrelevant in your view.

<ESMA\_QUESTION\_DLT\_8>

AFTI agrees broadly with the challenges of the DLT for securities markets as identified by ESMA.

* Scalability

In relation to Point 30 on scalability, the growing range of applications is very largely prohibited by the current legal framework

In addition, it remains to be proven whether DLT lies the capacity to handle large volumes of time – critical transactions across multiple institutions and jurisdictions, and which technological developments would be required to do so.

* Interoperability

In relation to Point 31 on interoperability, we agree this is one area that needs to be further explored, for interoperability between legacy systems and DLT systems as well as between different DLT systems.

* Cash leg of the transactions

In relation to Point 32, the way the cash leg of the transactions is processed is an important issue that still needs to be addressed. The questioning of the simultaneous settlement of cash and securities would be considered as a serious regression

* Recourse mechanism

A counter transaction correcting the flawed record could be decided off ledger by mutual agreement between the affected parties. The governance framework of the DLT should define the rules governing this kind of transactions.

* Netting

As mentioned in the answer to Q1, introducing a real time gross settlement model (including real time cleared secured financing / SFTs) would be a fundamental shift in the operating basis of global financial markets and will, inevitably, give way to increased systemic risk.

Absence of netting for spot transactions would increase significantly the number of settlement instructions and the size of the ledger.

* Margin finance and short selling

The design of a solution based on DLT should not put impede the ability of investors to finance margin and sell short. The possession of assets should not be seen as a pre-requisite.

* Governance

DLT applied to securities markets should be permissioned based and that it should rely on a stringent governance framework and legal architecture, and the issues covered in the consultation paper, as authorisation of participants, their liabilities, rules addressing their interaction, and the identification of the entity liable vis-à-vis third parties for the activities of the network.

* Privacy

In our view, privacy issues are of paramount importance and any solution should be designed granting to the various types of participants different levels of access to data in accordance with regulations.

In addition, we consider that achieving trust between market actors on a DLT-based system requires strong cyber-resiliency capacities. Cyber-security is the key of the implementation of the DLT on markets.

If the principles of DLT governance do not provide enough security and protection, there is a huge risk of harmful cyber-attack, not only against assets but also against data. In the current siloed system, orders and instructions follow a chain of intermediaries, whereas in a distributed ledger, the system can provide a trustful ledger but where data is accessible to all participants. Implementing DLT solutions in financial markets leads to revisit digital governance and protection of data, applying Internet governance principles to the transactions management. The technology has to guarantee the same level of data privacy as in the existing (legacy) systems.

<ESMA\_QUESTION\_DLT\_8>

##### Do you see any other potential challenges? If yes, please explain.

<ESMA\_QUESTION\_DLT\_9>

Another point of attention for DLT implementation is the issue of the cooperation between market actors. This includes, among other issues, the definition of a common project, the identification of shared objectives, multi-layer governance schemes, clear and shared business models and the implementation of common standards. Current financial markets infrastructures are neutral on price formation. Issuing securities in a DLT and holding them in a DLT, should get the same guaranty that the value of those securities are exclusively linked to the issuer risk and general economic considerations, but NOT on the intrinsic functioning of the DLT. Furthermore, the DLT must be watertight and the integrity of the issuance needs to be guaranteed. In other words: the DLT must not create securities by virtue of its intrinsic functioning.

<ESMA\_QUESTION\_DLT\_9>

##### Which solutions do you envisage for these challenges and where do the current initiatives stand in terms of practical achievements to overcome them?

<ESMA\_QUESTION\_DLT\_10>

Implementing a reliable governance framework is key. The governance model has to be designed for the only type of DLT that should be implemented for securities markets: permissioned DLT with disclosed and regulated operators. In this respect, stakeholders have to frame a double level of governance. First, defining the role of each operator in the DLT system through multi-layer governance. Second, outlining a regulation of operators and nodes, submitted to specific obligations and rules, including prudential rules.

The DLT is still largely untested. Related open issues and risks are also largely uncharted. We recommend that a high number of limited scope and highly different use-cases are tested in order to determine as precisely as possible the nature of DLT related issues and how to address them.

<ESMA\_QUESTION\_DLT\_10>

##### Do you agree with the analysis of the key risks? Please explain, e.g., are some risks more important than others, are some irrelevant in your view.

<ESMA\_QUESTION\_DLT\_11>

AFTI agrees broadly with the risks of the DLT for securities markets as identified by ESMA. We want to insist on interconnectedness issues: even if market segments are already highly interconnected. DLT could increase this interconnection by gathering players on a common network potentially interacting with other systems, and adding new market segments to the overall set up

Regarding access to information by regulators the situation should not be considered as more problematic than today due to encryption technologies. Indeed, information in financial markets is currently highly protected, as markets rely on trust and information asymmetry. A highly protective governance framework needs to be established while the platform is designed and developed in order to maintain an adequate level of data protection on the ledger and in parallel improve access to the relevant information for risk management or oversight for participating organisations.

<ESMA\_QUESTION\_DLT\_11>

##### Do you see any other potential risks? Please explain.

<ESMA\_QUESTION\_DLT\_12>

AFTI identifies another risk in the implementation of the DLT: market actors are likely to foster innovation over legacy systems, and the risk is to lose the key strengths of the current functioning of the financial market, such as the legal novation for clearing and the protection against settlement fails provided by CSD, major elements for market stability

As securities markets involve extremely high value of assets in large volumes we deem necessary that:

* The “securities DLT” is a closed-end DLT, e.g. a consortium of a limited number of node operators operates the DLT.
* Node operators are duly regulated and authorized and are subject to governance rules and financial stability principles.

<ESMA\_QUESTION\_DLT\_12>

##### How could these risks be addressed? Please explain by providing concrete examples, especially for the risks potentially affecting your organisation.

<ESMA\_QUESTION\_DLT\_13>

The risks can be addressed if DLT systems are designed to include a bulletproof protection infrastructure and a clearly defined multi-layer governance system between stakeholders, reflecting the legacy structure of securities markets. This would be supported by an appropriate regulatory framework.

<ESMA\_QUESTION\_DLT\_13>

##### Do you think that the DLT will be used for one of the scenarios above? If yes, which one(s)? If no, please explain?

<ESMA\_QUESTION\_DLT\_14>

AFTI is not in favor of discontinuing the function of CCPs. CCPs monitor and mitigate counterparty risk.

The ability of a CCP to maintain net positions is a condition to its ability to hold positions and manage risks (netting and compression for derivatives).

Scenario 1.1: Clearing of OTC derivative transactions in a DLT environment

DLT could be applied to clearing, for derivatives subject to clearing obligation and those which are not, provided that the protection against counterparty risk is fully asserted and the CCP is notably able to hold net positions, and to process compression for OTC derivatives.

Considering the current limitation of technology, the complexity of the processes within the CCPs and the high level of efficiency and security they ensure implementation of the DLT for cleared OTC derivatives would be the least likely scenario.

We agree with the comments in point 21. While it is true that there may be record keeping aspects of derivatives clearing that might benefit from DLT, the term nature of derivatives suggests that the likelihood of a full “DLT” solution substituting CCPs is low.

Scenario 1.2: OTC derivative transactions not subject to clearing obligation by CCPs

Intermediaries could extract more value from a DLT application in OTC derivatives. Non-cleared EMIR derivatives, without CCP are the perfect environment for streamlining process of confirmations, notifications, event reporting and contract sign-off. Setting a single point of truth mitigates operational risk and costs of portfolio processes. In this scenario, DLT would function like a register and a trade repository in a notary type function.

Scenario 2: Clearing of exchange- traded derivative transactions in a DLT environment

Substitution of the CCP is not really conceivable, but DLT could manage some clearing processes provided the technology is significantly upgraded to cope with functional complexity and scalability requirements. As the type of instrument is different (ETD versus OTC derivatives), another distributed ledger could be used. Multiple distributed ledger system to accommodate multiple category instruments could be implemented. It would address the complexity linked to the number of type of assets and the scalability of the technology, as one single ledger might hardly be able to host all transactions.

Scenario 3: Clearing of other types of assets in a DLT environment

As far as securities are concerned, a difference has to be made between spot transactions and SFTs.

Spot transactions in the context of a DLT integrating the value chain counterparty risk could be reduced.

Considering securities financing transactions (SFT), it is true that as of today they are more and more entrusted to CCPs. In that area of business, as for derivatives, CCPs could participate to the DLT for the processing of open positions and managing risks until the maturity of the transaction. Nevertheless, the same issues as for derivatives need to be addressed as feasibility and benefit of using DLT for clearing are concerned.

<ESMA\_QUESTION\_DLT\_14>

##### If the DLT is used for one of these scenarios, how compliance with the regulatory requirements attached to each scenario could be ensured?

<ESMA\_QUESTION\_DLT\_15>

DLT should be viewed as a tool in order to streamline the overall organization and processes, while maintaining the same level of efficiency and safety. It should comply with the regulatory principles and allow its participants to comply with them.

Regulators could be one of the nodes of the DLT and as such should closely be associated to the functional design and governance of the DLT. This close cooperation is the guarantee of the consistency between the regulatory framework adapted to the new set up based on the technology and the role of its participants and the functioning of the platform.

One major point is the definition of the roles and liabilities of stakeholders (including in case of fraud or error), participating to the platform but much more important running and maintaining it in accordance with the governing rules. It should be a legal entity authorized and supervised by authorities.

Should also be defined when required correction mechanism and penalties in case of infringement of the DLT rules of intellectual property.

<ESMA\_QUESTION\_DLT\_15>

##### Do you think that the DLT will be used for one of the scenarios above? If yes, which one(s)? If no, please explain?

<ESMA\_QUESTION\_DLT\_16>

DLT could be used in the context of the three scenarios even it seems obvious that the scenario 1.1 and to a lesser extent scenario 1.2 (only if DLT appears to be the optimal technological solution: in some cases, indeed recourse to a centralized data based infrastructure may appear more convenient). These scenarii could be feasible within a shorter timeframe, provided they address specific, limited scope business cases.

Scenario 2 may be envisaged: as in the previous scenarios, the objective is to decentralise the ledgers and their settlement engines that are currently managed by CSDs and in parallel to shorten the overall value chain between the issuers and the investors. Nevertheless, we are of the opinion that there are potentially three major obstacles to implementing this scenario in the short term:

* The current functional limitation that features the technologies underlying DLT opposed to the high level of sophistication of the legacy systems (just to mention a few: DVP, auto collateralisation, settlement discipline regime ....),
* the constraint of the investment cycle since T2S is just being implemented after more than ten years of hard work and some heavy investments from the industry,
* the stringent and complex regulatory framework that has to be upheld but also adapted, especially in a cross border context.

<ESMA\_QUESTION\_DLT\_16>

##### If the DLT is used for one of these scenarios, how could compliance with the regulatory requirements attached to each scenario be ensured?

<ESMA\_QUESTION\_DLT\_17>

For the coming years we would advocate that not legal or regulatory changes should be made before DLT is tested in the current environment.

Once testing and pilot- implementations are s have been made successful and provide for a better understanding of less successful allowing determining the necessary changes improvements and how to address risk, considerable legal regulatory changes may be considered changes might be necessary.

<ESMA\_QUESTION\_DLT\_17>

##### Do you think that the DLT will be used for safekeeping and record-keeping purposes? Please explain, with concrete examples where appropriate.

<ESMA\_QUESTION\_DLT\_18>

DLT may indeed be used for safekeeping and record-keeping purposes as by essence the purpose of a ledger is to maintain assets positions.

Post trade can provide services for record keeping, both at issuer level and at investor level, as this double standard already exists in the European Union. The use of the DLT in record-keeping will depend on the governance model and distribution of roles between issuer, investors and intermediaries.

<ESMA\_QUESTION\_DLT\_18>

##### If the DLT is used for the safekeeping and record-keeping of ownership, how could compliance with the regulatory requirements be ensured?

<ESMA\_QUESTION\_DLT\_19>

Same answer as to Q17.

<ESMA\_QUESTION\_DLT\_19>

##### Do you think that the DLT will be used for regulatory reporting purposes? Please explain, with concrete examples where appropriate.

<ESMA\_QUESTION\_DLT\_20>

There are two mains perspectives: first the DLT is used for reporting purpose only instead of the current solutions based on trade repositories, if it is proven that it improves the reporting process. The regulators could be part of the DLT. In such a case, the DLT could be operated by an authorised legal entity.

The second approach is to associate regulators to the operational DLT in order for them to get the information directly from the ledger.

Rules for accessing the data would in both cases be defined on basis of a collaborative approach of the governance of the DLT for that purpose.

<ESMA\_QUESTION\_DLT\_20>

##### If the DLT is used for regulatory reporting purposes, how could compliance with the applicable regulatory requirements be ensured?

<ESMA\_QUESTION\_DLT\_21>

Please refer to response to Q.17 the one to question 17 in the case where regulators participate directly to the DLT.

<ESMA\_QUESTION\_DLT\_21>

##### Do you think that the DLT could be used for other securities-related services than those already discussed, in particular trading and issuance?

<ESMA\_QUESTION\_DLT\_22>

The use of the technology for trading is taken for granted, especially for trade matching operations.

Tests are carried out in some fields (eg. bondholder registry, corporate events and issuance registry in primary market).

We also believe the investment funds market may also be a promising area.

Databases (funds, prospectus, kids, and market data) could also candidate for DLT application.

<ESMA\_QUESTION\_DLT\_22>

##### Do you see potential regulatory impediments to the deployment of the DLT in securities markets?

<ESMA\_QUESTION\_DLT\_23>

Current regulations were framed for current market procedures and infrastructures, without any reference to DLT. Should DLT become the new reference in financial markets, many regulations and standards would need to be revised including MIFID, CSDR and EMIR. But this revision should not affect the same objective of a regulatory framework

AFTI is of the opinion that the “siloed” perspective in this CP may be challenged. Indeed, far from being a highly fragmented sector, AFTI views the post-trade market as a combination of highly interconnected processes and actors.

For this reason, post-trade actors, including market infrastructures should be viewed in all their capacities and functions, as they are all directly involved in the transaction processes.

<ESMA\_QUESTION\_DLT\_23>

##### Should regulators react to the deployment of the DLT in securities markets and if yes how? If you think they should not do so please justify your answer.

<ESMA\_QUESTION\_DLT\_24>

The regulators are part of the financial markets stakeholders and, as such, have a role in the possible DLT implementation. Two complementary visions are necessary to manage the application of the DLT: the “Oversight” approach, with regulators protecting the political objectives of the regulatory framework and the “foresight approach” with regulators contributing to a better understanding of the potential radical changes brought by DLT.

<ESMA\_QUESTION\_DLT\_24>