Submission of the Association of Global Custodians – European Focus Committee

ESMA Call for Evidence: DLT Pilot Regime and Review of MiFIR Regulatory Technical Standards on Transparency and Reporting

Section 4: Use of DLT for trading and settlement

Q.1 Please provide any general observations or comments that you would like to make on this call for evidence, including any relevant information on you/your organisation and why the topics covered by this call for evidence are relevant for you/your organisation.

The European Focus Committee of the Association of Global Custodians[1] ("AGC-EFC" or the "Committee") welcomes the opportunity to submit response to the ESMA Call for Evidence: DLT Pilot Regime and Review of MiFIR Regulatory Technical Standards on Transparency and Reporting dated 4 January 2022 (ESMA 70-156-4957) (the "Call for Evidence").

Established in 1996, the Association of Global Custodians (the "Association") is a group of 12 global financial institutions that each provides securities custody and asset-servicing functions primarily to institutional cross-border investors worldwide. As a non-partisan advocacy organization, the Association represents members' common interests on regulatory and market structure. The member banks are competitors, and the Association does not involve itself in member commercial activities or take positions concerning how members should conduct their custody and related businesses.

The Association has engaged extensively with government and regulatory authorities throughout the world to support their work to better understand our industry and ensure the safe and efficient provision of securities custody services for the benefit of investors and the financial system as a whole. The Association continues to support these efforts and stands ready to provide assistance and information – within the boundaries of competition and antitrust constraints - as authorities require.

The Association has actively participated in DLT-related initiatives across the EU, the UK and the United States. Within the EU, the Association participated in and contributed to the informal expert group established by the European Commission in 2016 which focused on post-trading, including impact on "Fintech / Distributed Ledger Technology": the European Post Trade Forum (EPTF).[2] The Association's views and contributions on DLT in the post-trade space began to be expressed at the EU level with the EPTF Report issued 15th May 2017 and continues to this day.

The AGC-EFC will confine its responses specifically to post-trade elements of the ESMA Call for Evidence set out in Section 4 ("Use of DLT for Trading and Settlement"). We defer to other associations more suited to respond to questions raised in the other Sections.

Q2. Please indicate whether you/your organisation is planning to operate a DLT MI under the DLT Pilot and provide some high-level explanation of the business model.

[1] The members of the Association of Global Custodians are: BNP Paribas; BNY Mellon; Brown Brothers Harriman & Co; Citibank, N.A.; Deutsche Bank; HSBC Securities Services; JP Morgan; Northern Trust; RBC Investor & Treasury Services; Skandinaviska Enskilda Banken; Standard Chartered Bank; and State Street Bank and Trust Company.

[2] http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3394

Significant private infrastructure has been developed in the market to offer access to investments over the blockchain. The Committee leaves it to its members to respond separately as to their commercial plans.

Q3. What are the key elements supporting the increased use of DLT in the field of financial services? What are the main obstacles, including in the technical standards, for the development and up-take of DLT-based solutions (listing, trading and settlement)? Do you plan to operate a restricted (permissioned) or unrestricted (permissionless) distributed ledger?

Key elements supporting the use of DLT

The members of the AGC-EFC are mindful of the potential usefulness of digital ledger technology (DLT) to ***improve*** the existing post-trade framework. The effectiveness and safety of market infrastructure as well as intermediaries in facilitating access to assets and associated rights could be significantly enhanced. In this connection, we agree with proponents of DLT as referenced by the Bank for International Settlements (BIS):

> *DLT may radically change how assets are maintained and stored, obligations are discharged, contracts are enforced, and risks are managed. Proponents of the technology highlight its ability to transform financial services and markets by: (i) reducing complexity; (ii) improving end-to-end processing speed and thus availability of assets and funds; (iii) decreasing the need for reconciliation across multiple record-keeping infrastructures; (iv) increasing transparency and immutability in transaction record keeping; (v) improving network resilience through distributed data management; and (vi) reducing operational and financial risks. DLT may also enhance market transparency if information contained on the ledger is shared broadly with participants, authorities and other stakeholders.*[3]

Particularly in relation to settlement systems (SSs), DLT ***inherently*** provides enormous opportunities to reduce systemic risk associated with today's market infrastructure by eliminating a central point of failure and at the same time significantly improving capacities for resilience. This is because DLT enables nodes in a network (or arrangement) to securely propose, validate and record state changes (or updates) to a synchronised ledger that is distributed across the network's nodes.[4]

In terms of improvements to asset safety, the nature of DLT could significantly reduce burdensome and costly reconciliation inefficiencies across divergent proprietary legacy systems by reducing data discrepancy, facilitating quicker reconciliation and eliminating or reducing burdensome back-office activities. This in turn may even allow for more granular recognition of rights and entitlements through intermediary chains through to the SS.

Enhancements such as faster processing and reduced reconciliation work may lead to more transactions occurring in real-time or near real-time in certain markets, which in turn could have a positive impact on credit and liquidity needs associated with payment, clearing and settlement

[3] Bank for International Settlements, Committee on Payments and Market Infrastructures, *Distributed ledger technology in payment, clearing and settlement - An analytical framework* (February 2017) (the "BIS Paper"). Available at: https://www.bis.org/cpmi/publ/d157.htm
[4] Id., p. 8.

activity. The BIS in its paper pointed out that - as with RTGS systems - real-time or near real-time transfers allow for a reduction in credit exposures.[5]

As the BIS pointed out in its report, faster transfers suggest that participants will also receive funds and securities more quickly, freeing up liquidity that could be tied up in collateral as is the case in today's FMIs.[6] However, the BIS cautioned that the net impact on credit and liquidity will depend on how the arrangement is designed and on the associated behavioural changes it induces.

There is enormous potential to improve shareholder identification, shareholder rights and corporate action processing. For example, issuers would be able to make information to be disclosed to shareholders (and other classes of investors) immediately and directly over the distributed ledger instead of today's burdensome process involving potentially numerous intermediaries. A harmonised approach towards using DLT developments in this context have the strong support of the industry.

The immutability of data recorded in the ledger is an obvious major benefit of DLT. Immutability is crucial to the safety of an arrangement as it relates to data integrity.

However, the adoption of common technology used by across interoperable platforms will not be sufficient unless care is taken in adapting DLT to identified opportunities and needs. It is essential that existing issues in legacy systems and processes are mapped for this purpose so that the benefits of new technology are maximised and not squandered.

Moreover, a broadly accepted legal framework is needed as well: DLT presents an opportunity for harmonisation across divergent legal systems that has eluded market participants historically, causing increased legal risk, inefficiency and costs. It would be a pity if this opportunity were squandered.

Main obstacles

In a recently issued report[7], the Financial Stability Board (FSB) notes that although the extent and nature of use of crypto-assets varies somewhat across jurisdictions, financial stability risks could rapidly escalate, underscoring the need for timely and pre-emptive evaluation of possible policy responses.

The FSB Report highlights a number of potential vulnerabilities associated with crypto-asset markets. These include increasing linkages between crypto-asset markets and the regulated financial system; liquidity mismatch, credit and operational risks that make stablecoins susceptible to sudden and disruptive runs on their reserves, with the potential to spill over to short term funding markets; the increased use of leverage in investment strategies; concentration risk of trading platforms; and the opacity and lack of regulatory oversight of the

[5] BIS Paper, p. 19.
[6] Id.
[7] The FSB's Report examines developments and associated vulnerabilities relating to three segments of the crypto-asset markets: unbacked crypto-assets (such as Bitcoin); stablecoins; and decentralised finance (DeFi) and "other platforms on which crypto-assets trade". The FSB explains that these three segments are "closely interrelated in a complex and constantly evolving ecosystem and need to be considered holistically when assessing related financial stability risks." Financial Stability Board, *Assessment of Risks to Financial Stability from Crypto-assets* (16th February 2022) (the FSB Report), p. 2. The report is available at: https://www.fsb.org/2022/02/assessment-of-risks-to-financial-stability-from-crypto-assets/

sector. The report also notes wider public policy concerns related to crypto-assets, such as low levels of investor and consumer understanding of crypto-assets, money laundering, cyber-crime and ransomware.

We agree with the BIS that the use of DLT does not come without risks in the particular context of settlement systems:

> *In most instances, the risks associated with payment, clearing and settlement activities are the same irrespective of whether the activity occurs on a single central ledger or a synchronised distributed ledger. That said, DLT may pose new or different risks, including: (i) potential uncertainty about operational and security issues arising from the technology; (ii) the lack of interoperability with existing processes and infrastructures; (iii) ambiguity relating to settlement finality; (iv) questions regarding the soundness of the legal underpinning for DLT implementations; (v) the absence of an effective and robust governance framework; and (vi) issues related to data integrity, immutability and privacy.*[8]

Each and every one of the items identified by the BIS must be addressed thoughtfully in the context of the Pilot Regime and what follows afterward.

(i) *potential uncertainty about operational and security issues arising from the technology;*

Regarding settlement processes, we agree with the BIS that it is important to consider potential improvements in the speed of end-to-end processing at the "ecosystem level" (i.e., across the value chain): the BIS pointed out in its report that the speed of transaction settlement within the infrastructure itself may actually be slower than today because, by way of example, DLT arrangements may take longer to achieve settlement when compared with real-time gross settlement (RTGS) systems. The BIS cautioned that from a technical point of view, "the process for validating a transaction and reaching consensus in DLT is potentially more complex than with a central entity."[9]

At the same time, we are conscious that the availability of a distributed ledger - which is available to all concerned parties and which establishes an up-to-date definitive record of positions and transactions - has the ability to speed up distribution of information across the custody chain, and reduce/eliminate reconciliation issues and associated risks.

(ii) *the lack of interoperability with existing processes and infrastructures;*

Given that market infrastructures display strong network effects, and that capital markets activities depend on eco-systems made up of multiple actors performing different roles, the success of DLT-based solutions will be heavily dependent on the degree to which they succeed in inter-connecting and inter-operating both with traditional actors and processes, and with other DLT-based solutions. The issues of access and interoperability will be critical in the context both of the pilot regime and of any definitive regulatory framework. The issues of access and interoperability are also important in order to counteract any risks of market fragmentation. One key potential obstacle for DLT-based solutions would be any inability to effect settlement in central

[8] BIS Paper, p. 12.
[9] BIS Paper, p. 18.

bank money. For this reason, provision and access to wholesale central bank money digital currencies, or at a minimum connectivity with existing CeBM systems, are important requirements. Similarly, DLT-based solutions would need to be integrated into existing operational processes relating to the custody chain, such as the provision of information by issuers, and the application of withholding tax on income distributions.

(iii) *ambiguity relating to settlement finality;*

In the current regulatory environment, to the extent a party facilitates the purchase and sale (trade) of "securities" over these platforms, it would be characterised – at least if operating the EEA – as a venue requiring regulation (e.g., an MTF under MiFID). To the extent market participants' purchases and sales are given effect so that a platform's records purport to represent "ownership", the platform would be characterised as an operator of a "securities settlement system" (SSS) defined with reference to the Settlement Finality Directive. As we discuss further in our response to Question 4, whilst DLT may offer an opportunity to merge these two functions, we believe certain key considerations must first be addressed, including addressing potential conflicts of interest, the need for resource checks to ensure timely payment, and the ability to compress post-trade funding (including foreign exchange) and instruction matching processes.

In any case, we urge clarification that settlement finality under the SFD will be applied by a DLT SS operator. Settlement finality provides certainty as to ownership, including in the case of participant insolvencies, as well as supporting financial collateral arrangements under national law and the Financial Collateral Directive. This approach has served generally to support Member State national laws regarding property rights in securities: it should not matter whether these rights are obtained in dematerialised form over systems that are used in the market currently or over platforms utilising DLT: the Pilot Regime should provide scope for property rights under national law, with settlement finality supporting this.

(iv) *questions regarding the soundness of the legal underpinning for DLT implementations;*

Application of settlement finality (as discussed above) interlinks with needed legal certainty under private (national) law. Legal certainty regarding rights and entitlements can be supported if the following considerations are taken into account:

- An entry on the ledger should represent direct rights against issuers that are enforceable under national law by end-investors;
- Entries on the ledger should be considered a form of intangible "property", which provides protections such as good-faith acquisition, insolvency remoteness, certainty in financial collateral arrangements and identification and, as addressed more specifically below, the application of governing law;
- In the event other legal principles are to substitute for "property" rights in the form of smart contracts, a clear basis should for this should be established under applicable (and identifiable) national law;
- Rules applicable to the transfer and disposition of rights in any asset must be clearly established and supported in applicable law; and

- Clarity is needed as to what law governs - and which court is approached - if the above-mentioned rules are to be applied or if an aggrieved party seeks redress. This should be based on location of account, consistent with the well-known "Place of Relevant Intermediary Approach" (PRIMA)[10] in order to ensure continuity of existing national law principles on governing law: this in turn emphasises the criticality of the central administrator in establishing such a "location" (further discussed below).

Whilst provision for settlement finality in EU-level legislation may not address national law and choice of law issues directly, it is crucial that it at least supports them in terms of ensuring investors and other market participants have necessary protections supported by private law. A DLT-facilitated SS should support the same goals that an SSS supports today (e.g., insolvency protections, financial collateral arrangements under the FCD, etc.).

Finally, it must be assumed that post-trade intermediaries will continue to act for investors by providing access to DLT MIs. For this reason, we emphasise that the core records of intermediaries will be a function of what is recorded on the DLT SS ledger. Again, if national law is to apply to investors' rights and entitlements, it is crucial that settlement finality is provided to support the application of property rights in particular under national law.

Despite these challenges, and because of the potential offered by DLT, initiatives to create legal frameworks to accommodate it have emphasised the importance of being "technology neutral". A principle that the AGC therefore supports has been to achieve a framework that accommodates evolution and embraces all manner of investments made available using DLT.

(v) *the absence of an effective and robust governance framework;*

In this connection, we note, as does ESMA (para. 17), that the political agreement reached by the co-legislators for the Pilot Regime introduced technology-neutral wording that avoids reference to a specific type of DLT (e.g., "proprietary DLT" as originally mentioned in Recital 28 of the European Commission proposal). As ESMA also notes, Article 6(2) would allow an operator of a DLT market infrastructure not only "to establish" but also "to document as appropriate", the rules on the functioning of the distributed ledger it operates, the rules for accessing the distributed ledger and the participation of the validating nodes. ESMA suggests (para. 18) that this, at least in theory, would leave "the door open for unrestricted, i.e. permissionless, DLTs that are able to comply with all applicable requirements for DLT MI."

[10] 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.

First, a fundamental requirement is to be able to identify to whom legislation applies and has effect. As the BIS pointed out in its paper, permissioned platforms allow control over participants' access to the arrangement. Because access is controlled, the set of rules governing interactions can also be "off-ledger".[11] This makes the idea of a ruleset covering "operators" of "permissionless" systems more difficult to implement.

In the case of "permissionless" systems, rulesets would need to be embedded in smart contracts with one party responsible for enforcing them and, accordingly, being held accountable for their application and effectiveness.

We therefore suggest abandonment of the concept of an "operator": because of the "distributed" nature of validation of ownership rights in a DLT system, whether "permissioned" or "permissionless", there is no one party actually "operating" the system. We recommend employing a new term to more accurately describe the role of a central administrator or governance body who controls access to the system and provides certain services for the arrangement, including the notary function, dispute resolution, governance rules, validation of ownership rights, standard-setting and regulatory reporting[12] – and who is held accountable to perform these functions.

Moreover, a central administrator or governance body would better facilitate much-needed progress on a "Single Access Point" for issuers. This would obviate the need to provide information through existing chains to end investor.

(vi) *issues related to data integrity, immutability and privacy.*

How an arrangement records, maintains and shares data has implications for the safety of payment, clearing and settlement activity. We agree with the BIS that a fundamental requirement for any record-keeping system is to have records structured and maintained in such a manner that any legitimate entity can verify the relevant history of the record, including with respect to traceability.[13] Of course, privacy and confidentiality considerations intrude. The BIS wrote:

> *Different levels of privacy may be required depending on the design of an arrangement. In some arrangements, all nodes have access to a copy of the ledger and may, if allowed, see all transactional history. However, in applying DLT in the financial sector, participants may not want or be permitted to provide full visibility of the data. In such cases, access to information may be restricted. For example, data may be encrypted so that nodes only see the elements of the ledger that they are permissioned to see, even if it maintains a copy of the complete ledger. In some cases, nodes may only hold data that are relevant to them. Regardless of the level of privacy required, it is important to have adequate controls in place that restrict access to data as intended while allowing the nodes to reach agreement over the state of a ledger and the validity of transactions*.

Despite the need for immutability, there may be a need to "change" data in certain, limited circumstances, such as in the case of inadvertent errors, fraud and other events.

[11] BIS Paper, p. 13.
[12] This description is set out in part in the BIS Paper, p. 13, although we have added to it.
[13] Id., p. 24.

The ledger may merit "correction" or reversal of transactional data, most likely through the creation of new transactions (because the information on the ledger is immutable, it cannot itself be altered). This issue may be of particular concern for self-executing codes whereby mistakes in coding or other events may need to be corrected quickly. As such, governance and operational procedures are needed to address exceptions processing.

In addition to the foregoing key considerations, the continued relevance of intermediaries is also relevant to the question of whether an operator of a DLT SS should also be able to operate as a DLT MTF. We address this concern more fully in our response to Question 4 below.

Q4. Would you consider operating a DLT MTF? Would you consider operating a DLT SS without operating at the same time a DLT MTF (i.e. combined infrastructure DLT TSS)? If yes, under which conditions?

Whilst it has been suggested that DLT offers the opportunity for "trading" to converge with "settlement" – and whilst this may be possible under some scenarios - trade instructions likely will continue to exist separately from settlement instructions.

Intermediaries for example generally are precluded from performing both functions without separating them. Moreover, custodians by and large are careful to avoid conflating their post-trade-related activities with execution, which would require them to become brokers subject to the MiFID regime. Custodianship is strictly a non-discretionary activity by which an intermediary gives effect to client instructions without taking on any trade-related responsibilities, such as the duty to determine suitability or providing best execution. As a result, combined trade and settlement instructions cannot be expected to be provided via intermediaries.

Moreover, a purchase that is given effect over a DLT SS will still require a separate payment: how payment is facilitated, when, and in what form, will require careful thought. For example, payment via CBDCs may offer avenues for straight-through settlement that other forms of currency may not. While payments (whether they are for settlement, income or other) may be occurring on-chain in some form of e-money or digital cash tokens, it should also be possible to effect cash payment using traditional payment methods (commercial bank money or through existing RTGS central bank money systems). In all cases, clarity is required on the type of DvP model used and finality of settlement.

In addition, it cannot be assumed that trading in digital securities will take place only on a DLT MTF or DLT TSS. It is important that trading and other types of activity (such as collateral management) can take place on other venues and platforms. Accordingly, DLT MIs will have to have the capability of accepting settlement instructions.

A related point is that as not all investors will be able to hold assets directly on a DLT MI, and as some investors will use intermediaries, there will be a need for DLT MIs to accept settlement instructions sent by intermediaries. This means specifically that there will be a need for DLT MIs to have appropriate settlement functionalities, including the ability for intermediaries to control settlement so that settlement occurs only if the underlying investor has sufficient resources to allow for settlement.

The requirement that multiple market infrastructures and multiple intermediaries be able to access a DLT MIs highlights the need for robust access and interoperability requirements. In order to create open markets, and minimise fragmentation, these requirements should apply in both directions, namely access to the DLT MI, and access by the DLT MI to other DLT MIs and to traditional infrastructures.

Q5. Please provide an overview of how DLT securities trade in the current market structure (incl. what types of trading system are used, the relevance of secondary market trading)? Do you see any challenges with the current market structure following the application of the DLT Pilot?

To our knowledge, this has not happened yet to any significant extent. Major challenges remain, including:

- Interface challenges;
- Access and interoperability challenges; and
- Difficulties in interconnection and convertibility with traditional assets and markets.

Dated: 4th March 2022