

ISDA RESPONSE TO HM TREASURY CONSULTATION AND CALL FOR EVIDENCE ON UK REGULATORY APPROACH TO CRYPTOASSETS AND STABLECOINS

By Email

19 March 2021

Response to HM Treasury Consultation and Call for Evidence on UK Regulatory Approach to Cryptoassets and Stablecoins dated January 2021 (“HMT CP”)

The International Swaps and Derivatives Association, Inc. (“ISDA”) welcomes the opportunity to respond to the HMT CP. Before addressing some of the specific questions posed in the HMT CP, we have sought to provide some context to our views. We would welcome further discussion on any of these matters.

1 Context to our response

1.1 Opportunities for the derivatives market

There is currently a high degree of inherent complexity in the derivatives ecosystem. This has evolved partly as a result of the industry having had to respond to new regulatory demands within tight timeframes, allowing little opportunity for embedded processes to be redesigned. This complexity has put derivatives participants under considerable strain. New technologies (including distributed ledger technologies (DLT) and smart contracts) have the potential to contribute to alleviating this strain. In particular, we expect increased and more widespread implementation of automated, straight-through processing of financial transactions to increase efficiency and reduce costs for market participants.

Well-implemented digitization and automation will also bolster regulatory oversight and compliance (for example, by promoting the consistent creation, processing, and aggregation of global financial data) and strengthen the operational resilience of market participants and financial markets infrastructure. This in turn will reduce systemic risk and create a safer and more robust global financial system.

1.2 Promotion of digital standards

On 28th July 2020, ISDA and several other trade associations sent a letter to the Financial Stability Board, the International Organization of Securities Commissions and the Bank for International Settlements asserting our joint commitment to defining and promoting the development of a digital future for financial markets.¹ The letter sets out a series of principles and objectives aimed at promoting the development, distribution and adoption of digital standards within the financial markets, as the foundation for transformational change. These principles and objectives address

¹ Available at <https://www.isda.org/a/MGmTE/Digital-Future-for-Financial-Markets-Letter.pdf>

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three key areas: **Standardization**, **Digitization**, and **Distribution**, as outlined below. We see this approach as consistent with, and supportive of, the objectives of UK regulatory authorities.²

Standardization

Developing common legal and documentation standards reduces transacting inefficiencies within the derivatives ecosystem and provides a foundation upon which new technologies can be developed and implemented.³ Our initiatives under this theme include:

- **ISDA Clause Library.** ISDA has developed the ISDA Clause Library. This deconstructs the key provisions of the ISDA Master Agreement and collateral documentation and assigns meaning to the various obligations and events expressed within it. Using thousands of agreements and clause samples, we identified, defined, and categorized the most commonly negotiated clauses within ISDA documentation. Having established this framework, we created standard-form drafting options that are capable of achieving the vast majority of the most commonly negotiated outcomes within standard-form ISDA documentation.⁴
- **Revision of ISDA definitions.** ISDA is currently developing revised definitions booklets to be made available through an online platform. This includes the forthcoming 2021 ISDA Interest Rate Derivatives Definitions. A key driver for the project has been to make the definitions more technology friendly, for example by simplifying and standardizing sentence and paragraph structures, using formulaic expressions where possible and using binary or conditional language that can more easily be converted into code.

Digitization

Digitization of documentation, with supporting processes and data, will allow the key commercial and operational terms within legal agreements to be more closely aligned with and consistent with the operational and business processes they support, allowing for increased automation of those processes. Our initiatives under this theme include:

- **ISDA Create.** ISDA and Linklaters have launched ISDA Create, an online solution that allows firms to produce, deliver, negotiate, and execute derivatives documentation completely online. The ISDA Create platform builds on the framework created by the ISDA Clause Library and facilitates digitization by providing users with a complete digital record of their documentation and creating a 'golden source' for legal agreement data thus reducing the need for manual documentation analysis and reconciliation.
- **ISDA Common Domain Model.** ISDA has also launched the ISDA Common Domain Model (CDM), which establishes a common, digital representation of derivatives life-cycle events governed by ISDA documentation. ISDA developed the ISDA CDM as a response to the lack of standard data representations between market participants, as well as within financial institutions, which had resulted in inefficient and overly manual processes,

² See, for example, <https://www.fca.org.uk/publication/correspondence/dear-ceo-letter-transforming-data-collection.pdf> and <https://www.bankofengland.co.uk/paper/2021/transforming-data-collection-from-the-uk-financial-sector-a-plan-for-2021-and-beyond>, which identify the need to define and adopt common data standards in a way that is consistent throughout the financial sector.

³ See e.g., ISDA Whitepaper entitled The Future of Derivatives Processing and Market Infrastructure (September 2016) available at <https://www.isda.org/a/UEKDE/infrastructure-white-paper.pdf>

⁴ For more information, see <https://www.isda.org/2020/06/23/isda-launches-clause-library/>

requiring the reconciliation of trades, and giving rise to greater costs and operational risk.⁵ The CDM is now being expanded to include securities lending products. The CDM's modelling principles can be applied to applications across the financial markets. For example, the CDM is currently being expanded to support securities products and will be used for 'quarterly statistical derivatives return' reporting as one of the initial use cases under the Bank of England 'Transforming Data Collection'⁶ initiative.

- **ISDA Documentation User Platform.** ISDA has appointed Kinetix Trading Solutions and Linklaters to develop a user platform that will enable ISDA to amend and restate the definitions in full each time they are updated, avoiding the need for parties to manually assemble the definitional booklet plus various supplements in order to determine the terms of each trade at the time of execution. Users will also be able to quickly and easily compare different versions of the definitions as they evolve over time, use hyperlinked terms within the text to move to other parts of the document, and download or print.

Distribution

It is important that standards are made available in a way that facilitates the consistent and cost-effective development and implementation of mutualised technology solutions in the financial markets. Fragmented and duplicative distribution of digital offerings will inevitably result in incompatible and inefficient platforms and solutions.

To support this objective, ISDA is publishing the digitized expression of its standard clauses in ISDA documentation, and their supporting processes through the ISDA CDM, in a way that allows these components to be used to drive consistent implementation.⁷ ISDA has also published legal guidelines for the development of smart derivatives contracts in respect of equities, foreign exchange, interest rate and credit derivatives.⁸ These papers provide an introduction to the various derivatives products for readers who are designing and implementing technology solutions for these products.

1.3 Importance of legal and regulatory certainty

Achieving legal and regulatory certainty is vital to advancing the adoption of new technologies in financial markets. At present, technologies such as DLT and smart contracts present various issues in this regard.

ISDA (in collaboration with various partners) has published a series of whitepapers in relation to smart derivatives contracts, as outlined below, with a view to identifying some of the key issues. We would be very happy to discuss any of these topics further with you.

⁵ ISDA also manages the Financial Products Markup Language (FpML), an open-source standard language which market participants can use for a number of purposes, including to communicate trade details between participating entities, within an entity or between a participating entity and an external service provider. The FpML will not be replaced by the CDM.

⁶ See <https://www.bankofengland.co.uk/paper/2021/transforming-data-collection-from-the-uk-financial-sector-a-plan-for-2021-and-beyond>, for more information

⁷ For example, ISDA is working with Digital Asset to develop an open-source reference code library that will help derivatives market participants adopt the ISDA CDM. See <https://www.isda.org/2019/04/09/digital-asset-and-isda-introduce-tool-to-help-drive-adoption-of-isda-cdm/>

⁸ Available at <https://www.isda.org/a/CLXTE/ISDA-Legal-Guidelines-for-Smart-Derivatives-Contracts-Equities.pdf>; <https://www.isda.org/a/bPYTE/ISDA-Legal-Guidelines-for-Smart-Derivatives-Contracts-FX.pdf>; <https://www.isda.org/a/I7XTE/ISDA-Legal-Guidelines-for-Smart-Derivatives-Contracts-IRDs.pdf>; and <https://www.isda.org/a/ur4TE/Guidelines-for-Smart-Contracts-CDS.pdf>

- **The Future of Derivatives Processing and Market Infrastructure** (September 2016).⁹ This whitepaper summarizes the need to develop new and efficient processes for the global derivatives market and highlights the importance of distributed ledger technology and smart contracts.
- **Smart Contracts and Distributed Ledger – A Legal Perspective** (August 2017).¹⁰ This whitepaper sets out a framework for smart contracts in the context of ISDA's documents. It describes what smart contracts are and gives a preliminary and high-level description of the application of smart contracts within the ISDA documentation framework.
- **Smart Derivatives Contracts: From Concept to Construction** (October 2018).¹¹ This whitepaper proposes a practical framework for the construction of smart derivatives contracts.
- **Private International Law Aspects of Smart Derivatives Contracts Utilizing DLT** (January 2020).¹² This whitepaper considers the conflict of law aspects of derivatives contracts involving DLT including those governed by the laws of England and Wales.¹³

2 Response to Chapter 4 of the HMT CP

With that context in mind, we set out below our responses to the questions listed in Box 4.B of the HMT CP.

2.1 Q 20. What, specifically, are the potential benefits of the adoption of DLT by FMIs? What could be the benefits for trading, clearing and settlement?

Our whitepapers¹⁴ have identified that DLT could play a meaningful role in the development of a future derivatives market. In particular:

- **Single representation of a transaction.** Significant benefits stand to be gained from developing shared workflows that operate on the basis of a common representation of a transaction (i.e., a golden record) and related lifecycle event among all parties. This would remove the need for many of the duplicative reconciliation processes that exist today, such as reconciliation for settlement, compression, and margining purposes. More importantly, it will assist market participants and regulators to access an accurate and up-to-date instance of a transaction at any time, potentially removing or reducing some of the current burdens of regulatory reporting. Systems based on DLT offer a structure that solves for these aims.
- **Smart contracts.** Smart contracts can be used to facilitate the automated straight-through processing of financial transactions. Whilst smart contracts do not require DLT-based infrastructure, embedding smart contract code in a distributed ledger ensures there is only one “golden” version of the code which binds both parties. This means that parties can take

⁹ Available at <https://www.isda.org/a/UEKDE/infrastructure-white-paper.pdf>

¹⁰ Available at <https://www.isda.org/a/6EKDE/smart-contracts-and-distributed-ledger-a-legal-perspective.pdf>

¹¹ Available at: <https://www.isda.org/a/cHvEE/Smart-Derivatives-Contracts-From-Concept-to-Construction-Oct-2018.pdf>

¹² Available at <https://www.isda.org/a/4RJTE/Private-International-Law-Aspects-of-Smart-Derivatives-Contracts-Utilizing-DLT.pdf>

¹³ It also considers these issues from a Singapore law perspective. ISDA has also published papers that consider these issues from French, Irish, Japanese and New York law perspectives - see <https://www.isda.org/2020/10/21/private-international-law-aspects-of-derivatives-contracts-involving-dlt/> for more information

¹⁴ In particular, *The Future of Derivatives Processing and Market Infrastructure* and *Smart Contracts and Distributed Ledger – A Legal Perspective*

comfort that each participant's instance of the code will operate in the same way, reducing the potential for trade breaks and improving settlement times, amongst other benefits.

In a recent survey of our members on the potential use of DLT in collateral transfers, over 80% of respondents indicated that they saw benefits in DLT-based solutions, with 48% highlighting reduced operational risk and need for position reconciliation and a further 28% pointing to improved settlement times. Only 6% indicated that they currently use a distributed ledger solution as part of their collateral management process.

2.2 Q 21. What are the potential drawbacks of DLT for wholesale markets and FMIs?

In relation to the potential drawbacks of DLT we would highlight two points:

- **The downside potential is highly dependent on how the technology is designed and deployed.** Some proposed DLT solutions may not deliver all the features that markets currently rely on. For example, solutions that require transactions to be pre-funded may not be economically viable or fail to meet market needs for intra-day liquidity. New solutions will only be effective if they are designed to meet the needs of the relevant financial market participants. Likewise, in order to realise (or maximise) efficiency gains, new solutions may need to be integrated with existing market infrastructure and automation functions, as we discuss in our legal guidelines.¹⁵ Finally, as highlighted above, if new solutions are not developed on the basis of common standards, this will inevitably result in incompatibilities and drive inefficiency. It is therefore vital that new solutions are designed and implemented based on common foundations so that these potential drawbacks can be mitigated.
- **Many potential concerns regarding DLT are not relevant in the context of centralised, permissioned systems.** Decentralised and permissionless ledgers raise various novel concerns in relation to regulatory oversight and accountability. Notably, existing regulatory frameworks are ill-suited to overseeing systems that are not administered by any central obligor. If DLT were to be used in the mainstream derivatives market, we expect the infrastructure to involve a permissioned, private distributed ledger which is accessible by regulated participants, regulators and a centralised entity or group of entities which has override or super-administrator-type rights.¹⁶ This type of structure would not pose the same concerns as fully decentralised and permissionless ledgers.

2.3 Q 22. Is UK regulation or legislation fit for purpose in terms of the adoption of DLT in wholesale markets and FMIs in the UK? How can FMI regulation/ legislation be optimised for DLT?

There are currently various legal and regulatory barriers to the deployment of DLT in wholesale markets. We highlight a few key issues below:

- **Conflicts of law rules.** As we have outlined in *Private International Law Aspects of Smart Derivatives Contracts Utilizing DLT*, the use of DLT can create novel conflicts of laws issues which need to be addressed. In particular, solutions that involve treating records of a distributed ledger as a medium of value raise questions as to the *situs* of those assets. The *situs* of assets held solely through a distributed ledger (which by definition is distributed and can span several jurisdictions) is not clear under current conflicts of laws rules. It would be

¹⁵ See e.g., <https://www.isda.org/a/ur4TE/Guidelines-for-Smart-Contracts-CDS.pdf> at p.25

¹⁶ See *The Future of Derivatives Processing and Market Infrastructure*

helpful to have a common conflicts of law rule adopted internationally (for example by the Hague Conference on Private International Law, in collaboration with UNIDROIT and UNCITRAL¹⁷) to enable the participants in a system to agree to a uniform choice of law to govern all on-ledger transactions and be used as the *situs* of any tokens native to the system. Given concerns around the risks of forum shopping, we expect this may require national governments, judiciaries, regulators, and international standards-setting bodies to work on adapting or developing global legal standards aimed at ensuring the safe, transparent, and consistent regulation of DLT-based financial transactions, and to ensure that parties are unable to elect for their relationships to be governed by the laws of countries with inadequate policy, legal or regulatory oversight.

- **Regulatory compliance and RegTech.** As discussed in *The Future of Derivatives Processing and Market Infrastructure*, there is currently considerable scope for inconsistency in the way in which financial markets participants interpret technical specifications, particularly in relation to data, for reporting and compliance purposes. We believe there is an opportunity for regulators to work with the industry to adopt RegTech solutions to promote a more uniform approach to compliance. For example, if regulators were to reference common models within a regulatory text, they could have a greater degree of confidence about the common interpretation of rules for compliance purposes. This could be supported by the use of CDMs. Using CDMs provides opportunities to give greater confidence to both market participants and regulators, enabling a faster, cheaper, and more reliable implementation than was possible a decade ago. This would contribute towards standardizing the market as a foundation for structural change. We note that steps are already being taken towards this. Notably, ISDA has been supporting the work of the Bank of England towards developing common data standards and, as mentioned above, a number of the Bank's initiatives in this regard (including non-derivatives applications) will leverage the ISDA CDM.¹⁸ Ultimately, it will also enable regulators to issue new rules directly in the CDM in addition to legal text, allowing updates to be implemented far more efficiently.
- **Regulatory uncertainty and obstacles.** There is currently a lack of clarity as to the application of certain areas of existing financial regulation in the context of DLT-based systems, including the boundaries of applicable regulatory frameworks. For example, the following definitions can be difficult to interpret in the context of records on a distributed ledger and would benefit from clarification or amendment: the definition of "transferable securities" under MiFID II; the definition of "cash" under the Financial Collateral Regulations; the definition of a "transfer order" under the Settlement Finality Regulations; the meaning of "money" within the definition of "payment system" under s. 182 of the Banking Act 2009; and the meaning of "funds" within the definition of "payment system" under s. 41 Financial Services (Banking Reform) Act 2013.

Likewise, certain requirements under existing financial regulation can serve as obstacles to some DLT-based applications. For example, under the CSDR¹⁹, where a transaction takes place on a trading venue, the relevant securities are required to be recorded in book-entry

¹⁷ The International Institute for the Unification of Private Law (UNIDROIT) and The United Nations Commission on International Trade Law (UNCITRAL) are in the process of developing international principles relating to the legal nature, transfer and use of digital assets

¹⁸ See <https://www.bankofengland.co.uk/paper/2021/transforming-data-collection-from-the-uk-financial-sector-a-plan-for-2021-and-beyond>, for more information

¹⁹ Central Securities Depositories Regulations (and onshored equivalent), Article 3(2)

form in a Central Securities Depository. This can, in some cases, act as a barrier to deployments that involve recording the securities on a distributed ledger. Similarly, the narrow definition of “participants” under the SFRs²⁰ can prevent distributed systems which are designed to facilitate direct access by end users from benefitting from the settlement finality protections provided for under the SFRs.

In providing amendments, clarifications, or guidance, we would urge regulators to have regard to the potentially different nature of different DLT-based arrangements, with a view to defining the perimeter precisely and developing regulation that is appropriate based on the relevant features of the DLT-based system, its use and risks. In particular, we would highlight that records on a distributed ledger may simply be used to evidence rights and obligations, in the same way as other systems of books and records, rather than creating any new asset that is distinct from the underlying rights and obligations evidenced in the distributed ledger, or giving rise to a change in activity from a regulatory perspective. In other words, the deployment of a DLT-based system should be capable in certain circumstances of being a neutral event from a regulatory perspective.

We would also urge regulators to act quickly in resolving areas of regulatory uncertainty, in order to support innovation. This may involve: (i) adapting regulatory requirements that are a clear obstacle to digitisation; (ii) reviewing areas of regulation where further changes may be required; (iii) creating a framework within which firms can test DLT products with the benefit of exemptions to existing rules; (iv) providing guidance on the interpretation of existing rules in a DLT context; and/or (v) taking an agile and flexible approach to the application of existing rules to accommodate new technologies.

- **Regulating novel structures.** In some cases, the use of DLT in financial markets may *de facto* alter the allocation of risks and responsibilities between parties. Regulators should consider whether it would be appropriate in any circumstances to reallocate regulatory responsibilities to reflect that. For example, if a financial market infrastructure were to deploy a DLT-based system involving its participants validating transactions on a distributed basis (in accordance with the system rules), this may in certain circumstances be treated as an outsourcing arrangement under existing regulation. Given the nature of the arrangement it may, however, be more appropriate for the validators to bear certain principal regulatory responsibilities for the validation of transactions, rather than this all sitting with the central operator. Again, consideration should be given to the structure of the DLT-based system and the role played by those interacting with the system. For example, a validator may only validate transactions entered into by one participant, or may only ‘validate’ a mathematical state, which may not of itself result in any change to legal rights.
- **Constitution of securities under national law.** For certain DLT implementations (in particular, those intending to create digital records which constitute securities) it needs to be permissible for those securities to originate and transfer through a distributed system. There is currently a lack of clarity as to whether certain securities issued through a DLT-based system would be capable of meeting the requirements of UK corporate law (for example, under the Companies Act and/or Uncertificated Securities Regulations).

²⁰ The Financial Markets and Insolvency (Settlement Finality) Regulations, s 2(1)

2.4 Q 23. What are the wider industry incentives or obstacles to the adoption of DLT in wholesale markets and FMI in the UK?

In relation to incentives, please see paragraphs 1.1 and 2.1 above.

In relation to obstacles, we would highlight legal and regulatory uncertainty (as discussed under paragraph 2.3 above) as well as the need for the further development, distribution and adoption of digital standards within the financial markets (as discussed under paragraph 1.2 above).

2.5 Q 24. If market coordination is required to deliver the benefits of DLT, what form could it take?

It is imperative that coordination occurs across the market and with regulators to ensure that models are consistent with business and regulatory expectations. ISDA is well placed to facilitate coordination among regulators and derivatives market participants, through its working groups, forums, and initiatives. We are also committed to collaborating with other trade associations to coordinate and promote digital standards.²¹ The involvement and commitment of national authorities and regulators will be critical to the success of these endeavours.

Collaborative projects should focus on areas of mutual benefit where there is no competitive advantage. Mutualising the build of these types of common requirements will drive operating efficiency and allow firms to focus on their core market facilitation and risk management roles.²²

2.6 Q 25. Would common standards, for example on interoperability, transparency/confidentiality, security or governance, help drive the uptake of DLT/ new technology in financial markets? Where would common standards be most beneficial?

As we have outlined in paragraph 1.2 above, we see the promotion of digital standards as vital to laying the foundation for further automation, and we have undertaken a number of initiatives in support of this objective. We would reiterate that the involvement and commitment of national authorities and regulators will be critical to the success of these endeavours.

We expect that further standards will also be needed to support a framework for smart derivative contracts. As we highlight in *Smart Derivatives Contracts: From Concept to Construction*, this will include regulatory standards, legal standards, commercial standards and technology standards.²³

For the global derivatives market, it is important that these standards are established at an international level. In particular, any new regulations directly applicable to the use of smart contracts in financial markets should be consistent with internationally agreed standards, with national implementation harmonized as far as possible. Likewise, in some areas international legal standards will be important, notably in relation to conflicts of law issues, as discussed in paragraph 2.3 above.

2.7 Q 26. What should the UK government and regulators be doing to help facilitate the adoption of DLT/new technology across financial markets/ FMIs?

We would urge government and regulators to:

²¹ See our joint letter, available at <https://www.isda.org/a/MGmTE/Digital-Future-for-Financial-Markets-Letter.pdf>

²² For more on our approach to collaboration, see *The Future of Derivatives Processing and Market Infrastructure* at p. 20

²³ For further detail see *Smart Derivatives Contracts: From Concept to Construction*, at p. 6 - 8

- support the efforts of ISDA and other industry bodies in the promotion of digital standards and collaborate with industry, particularly in relation to the development of RegTech (as discussed in paragraphs 1.2 and 2.3 above);
- resolve areas of legal and regulatory uncertainty with a high degree of precision and nuance, in particular to distinguish between the range of different ways in which DLT may be deployed in the financial markets (as discussed in paragraph 2.3 above); and
- drive common legal and regulatory standards where necessary (as discussed in paragraph 2.6 above).

We would welcome further discussion on any of these matters.

Sincerely,

A handwritten signature in black ink, appearing to read "S. O'Malia". The signature is fluid and cursive, with a large initial "S" and a stylized "O'Malia".

Scott O'Malia
Chief Executive Officer
International Swaps and Derivatives Association, Inc.