ISO/TC68/AG2 - Standards Advisory Group
Secretariat
☎ +49 69 1344 3952
✉ matteo.accornero@ecb.europa.eu
3 March 2022

To: European Securities and Markets Authority - ESMA

Re: Call for Evidence on the DLT Pilot Regime

Dear Sir / Madam,

I write to you in my capacity as convenor of the Standards Advisory Group (SAG) of Technical Committee 68 of the International Organization for Standardization (ISO).[1]

The SAG as a subgroup of TC68 (TC68/AG2) acts as an advisory sounding board to support and engage with regulators on financial services standards requirements, for the effective and efficient use and development of financial services standards, delivered using a cooperative relationship approach. The SAG enables a proactive dialogue with regulators on financial services standards matters.

The SAG's objectives are:

- Provide a forum for mutual assistance between the global regulatory community and ISO in carrying out their respective authorities and responsibilities with respect to financial services standards;
- Aid the adoption and promotion of consistent standards, where possible;
- Effectively deal with common issues collectively and consistently; and
- Encourage strong and open communication within the regulatory community and with the industry concerning financial services standards.

The present SAG's initiative represents a collective view of its membership and draws upon its knowledge as an expert standard setting body with practitioner-led experience in the development and use of standards.

With respect to the recent Call for Evidence, referenced above, we offer the response below to the questions in the consultation relevant directly to ISO standards falling within the remit of the SAG.

We stay at your disposal to address any questions or concerns you might have related to ISO standards in the field of competence of ISO TC68. Such requests should be directed to Matteo Accornero, Secretary of the ISO/TC68/AG2 (matteo.accornero@ecb.europa.eu).

We hope these comments can be taken into consideration and be useful for the progress of your work.

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[1] More information on the work of TC 68 can be found at: https://committee.iso.org/home/tc68.

Thank you and regards,

Karla McKenna
[signed]
Convenor of ISO/TC68/AG2

ISO TC68 AG2 Consultation response – 'ESMA Call for evidence on the DLT Pilot Regime'

General Comments

With a view to cater for broader crypto-asset identification, TC 68 has published a new standard (ISO 24165) for a Digital Token Identifier (DTI). The DTI is intended to cover representation of tokenized financial instruments, e-money tokens as well as other digital assets such as cryptocurrencies, virtual currencies, utility tokens, stablecoins, etc. The data elements of a DTI used to uniquely identify a digital token are based on objective and publicly verifiable technical characteristics of the digital token. Inclusion in the registry and the issuance of a DTI guarantees the existence of the token and its 1:1 relationship to its identifier in all circumstances, including after complex events such as forks on a blockchain. Such identification will be clearly distinguished from the existing ISO 4217, the standard for the representation of fiat currencies. ISO 24165 has two parts: Part 1 addresses the method for registration and assignment, while Part 2 determines the data elements required for registration. An ISO Registration Authority (DTI Foundation) is responsible for the issuance and management of DTIs.

The design of the DTI explicitly caters for consistency with the International Securities Identification Number (ISIN) standard (ISO 6166) which has been used for 40 years to uniquely identify financial and referential instruments and which is already embedded within the existing regulatory regime. In the 2021 revision of ISO 6166 standard, language was introduced to make explicit that ISINs are assigned irrespective of the technology used, including tokenized instruments. The data elements of an ISIN used to uniquely identify the instrument are based on the characteristics of the asset, making the ISIN and DTI complementary to each other – DTI for guaranteed uniqueness based on objective and verifiable technical data and ISIN for asset identification. By including the CFI - Classification of Financial Instruments (ISO 10962) and the FISN - Financial Instrument Short Name (ISO 18774) in the dataset accompanying the ISIN, two additional standards are part of the overall model classifying and describing the instruments on asset level. An ISO Registration Authority (Association of National Numbering Agencies - ANNA) is responsible for oversight of implementation and adoption of the ISIN, with assignment undertaken by a federated model of National Numbering Agencies. ISIN is part of several European regulations already.

Specific Answers

Q10. Are there any standards (e.g. messaging, identification of accounts/users, product identifiers, reporting, etc.) in a DLT environment that should be taken into account when revising the RTS 1 and 2?

> In addition to the ISIN (ISO 6166) as well as CFI (Classification of Financial Instruments – ISO 10962) and the FISN (Financial Instrument Short Name – ISO 18774), which are already embedded within the existing regulatory regime, the DTI (ISO 24165) can identify the specific chain where the DLT financial instrument is priced or traded. This can aid market transparency for DLT financial instruments that trade on multiple chains, by enabling market participants to perform chain-level analysis such as which chain contains the best prices or highest trading volumes. A DTI can also represent a group of functionally fungible tokens in order to assist with aggregation of DLT token data across multiple chains.

Q43. General fields (Fields 1 - 3), ISIN for RTS 1-3: Is it necessary to amend the current fields for the application in the context of a DLT environment? Do you expect any implementation issues on basis of the current fields? Should new fields be added in the context of a DLT environment?

The addition of the DTI (whether in the General fields section or in a different section) would add value as described in our responses to Q44 and Q45.

In the 2021 revision of ISO 6166 standard, language was introduced to make explicit that ISINs are assigned irrespective of the technology used, including tokenized instruments. As such, the use of ISIN in its current form will enable the identification of the digital asset such as security tokens. The DTI record already contains fields to link the DTI to external identifiers such as the ISIN and the DTI Foundation will include the corresponding ISIN within these fields. Both ISO Registration Authorities for the two standards cooperate to provide alignment for the provision of a complete and complementary picture at all levels for different kinds of digital assets.

Q44. Should a new field indicating the DTI be added to RTS 23 and RTS 1-3? What kind of analysis could be performed on a tokenised security by coupling ISIN and DTI information?

The ISIN and DTI are complementary to each other: DTI for guaranteed uniqueness based on objective and verifiable technical data and ISIN for asset identification. The addition of the DTI in combination with the ISIN provides the benefits described below:

- o In the case of a fork on the blockchain containing the DLT financial instrument, each fork will contain its own copy of the original token representing the DLT financial instrument. The DTI provides the ability to uniquely identify which copy of the token represents the DLT financial instrument. The ISIN continues to identify the asset as now.
- o In the case of the same DLT financial instrument trading on multiple blockchains, the addition of the DTI enables market participants to identify the specific chain associated with any price or trade and therefore enhances market transparency by enabling analysis of best prices per chain. Regulators will also be able to take into account the chain where a given trade occurred when performing their market abuse monitoring function.
- o Where DLT financial instruments on different chains are deemed to be functionally fungible, a DTI can also be issued to represent a group of DLT financial instruments. The DTI in this case can enhance market transparency by enabling aggregation of the order and market data across multiple chains and across the functionally fungible DLT financial instruments.
- o ISIN is already a part of the regulatory regime and used by market participants in their systems as a key standard and will therefore serve as a consistent asset level identifier.
- o Through the complementary use of two ISO standards maintained by two RAs it would be possible to cover all relevant elements of a tokenized security and other digital assets.

Therefore, in addition to the instances already cited by ESMA in this consultation, the inclusion of the DTI in RTS 23 and RTS 1-3 would add value as well.

Q45. Is the ISIN sufficient to ensure uniqueness of a given tokenised financial instrument? Is there any element of the DTI standard that you consider should be added as a separate field in RTS 23 and RTS 1-3?

The addition of the DTI enables uniqueness of the DLT financial instrument to be specified at the individual DLT level. The DTI is required where the uniqueness criteria include identification of the specific chain where the DLT financial instrument is implemented, priced or traded. A DTI can also represent a group of functionally fungible tokens in order to assist with aggregation of DLT financial instrument data across multiple chains. For these reasons, in

addition to the instances already cited by ESMA in this consultation, the inclusion of the DTI in RTS 23 and RTS 1-3 would add value as well.

Q48. ISO standards 20022 and RTS 22/23: Can ISO 20022 be implemented and used by DLT MTFs or DLT TSS and/or their members/participants to comply with the reporting required under Article 26 and 27 of MiFIR. Do you think ISO 20022 would represent an opportunity or an issue for DLT MTF? Please explain your statement.

The ISO 20022 methodology is technology independent and it is therefore also fit for purpose to be used for reporting from a DLT infrastructure. As rightly pointed out by ESMA, the common business definitions and logical construct of the ISO 20022 messages defined for MiFIR transaction reporting can also be implemented for a DLT. This would be beneficial for the reporting firms, trading venues and the competent authorities to format their data using the same structure.

Q50. Do you/your organisation plan to offer settlement of DLT securities in emoney tokens? If yes, what would be the most appropriate way for reporting these transactions? Do you agree with ESMA's proposal on how to populate the currency fields when the financial instrument is priced in e-money tokens?

The scope of both the DTI and ISIN includes identification of e-money tokens. Therefore, where settlement is not in fiat currency (ISO 4217) and is instead in in e-money token, the DTI and ISIN can be used in a complementary manner instead of ISO 4217 to uniquely identify the specific e-money token used in the settlement process, in the same manner as described for other tokenized financial and referential instruments.

Q53. Is it technically feasible to store on the DLT the details of the transaction according to ISO 20022 methodology in order to enable regulators to pull that data directly into a readable format without any transformation of the data? Do you believe that the use of ISO 20022 could have a significant negative impact in terms of scalability of the system and the related congestion risk?

If yes, please justify your answer and specify if the impact is dependent on the type of governance model and technology that the DLT is using.

As stated in our response to Q48, the ISO 20022 standard is technology independent. The SAG believes that it is technically feasible to store the transaction details according to the ISO 20022 specifications in a DLT environment like in any other technical environment.

Q54. Can all information to be reported under MiFIR Article 27 pursuant to Table III of the Annex to RTS 23 be recorded on the DLT according to the ISO 20022 methodology? Please explain your answer also in relation to scalability impact at DLT level.

Please see our response to Q53

Q55. Can all data necessary to perform the transparency (Article 2 of RTS 3) and DVC (Article 6 of RTS 3) calculations be recorded on the DLT according to the ISO 20022 methodology? Please explain your answer also in relation to scalability impact at DLT level.

Please see our response to Q53

Q56. Do you see any issue with obtaining the data elements required by RTS 22 and 23 from external databases like GLEIF, ISO 4217 list (currencies), ISO 10383 (MIC) or ANNA-DSB (ISIN) before the data is permanently stored into the distributed ledger? Please explain your answer.

The SAG does not see any issue with obtaining and accessing the data elements defined under these ISO reference data standards for DLT reporting.