



Digital Token Identifier Foundation

✉ [secretariat@dtif.org](mailto:secretariat@dtif.org)

28 May 2024

**To: Post-Trade Innovation Policy Team, Bank of England**  
**Post Trade and Market Conduct Team, Financial Conduct Authority**

**Re: Digital Securities Sandbox joint Bank of England and FCA consultation paper**

Submitted by email: [DSSCPResponses@bankofengland.co.uk](mailto:DSSCPResponses@bankofengland.co.uk) and [cp24-5@fca.org.uk](mailto:cp24-5@fca.org.uk)

The [Digital Token Identifier \(DTI\) Foundation](#)<sup>1</sup> and its Product Advisory Committee (PAC) welcome the opportunity to respond to the joint Bank of England and Financial Conduct Authority (FCA) [consultation paper](#) setting out proposals to implement and operate the Digital Securities Sandbox (DSS).

The DTI Foundation is the Registration Authority for the International Organization for Standardization (ISO) 24165 Digital Token Identifier (DTI) standard<sup>2</sup>, an ISO standard that enables the unique identification of all fungible digital assets which use distributed ledger technology (DLT) for token issuance, storage, exchange, a record of ownership, or transaction validation. The DTI itself comprises a code - a random, unique combination of nine alphanumeric characters allocated to a cryptoasset - and a record of reference data, which is held by the DTI Foundation. The reference data provides information about the DLT on which the token is deployed, as well as token technical attributes (such as address, name(s), and any external identifiers).

The DTI Foundation's mission is to provide the golden source reference data for the unique identification of cryptoassets. The DTI Foundation issues and maintains DTIs on a non-profit basis, to increase transparency in the digital asset space by creating a core reference data set based on open data principles and made available as a public good.

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<sup>1</sup> The DTI Foundation is a non-profit division of Etrading Software Limited: <https://etradingsoftware.com/>

<sup>2</sup> [ISO 24165-1:2021](#) and [ISO 24165-2:2021](#), Digital token identifier (DTI)

The DTI Foundation welcomes the objectives of the DSS; facilitating innovation to promote a safe, sustainable and efficient financial system while protecting financial stability, market integrity, and cleanliness. The DTI ISO standard was established to enhance efficiencies across crypto and digital asset markets, assisting supervisors and market participants in managing risks through greater transparency.

The DTI Foundation would like to highlight to the Bank of England and the FCA the benefits of using the DTI as an additional identifier alongside ISINs within the DSS to provide a holistic view of both security and token implementation details to supervisors and market participants. We have confined our response to question 1 on the draft guidelines on the operation of the DSS as this is directly relevant to the DTI Foundation's remit.

We remain at your disposal to answer any questions you may have and would welcome the opportunity to discuss the DTI ISO standard further with you. Please do not hesitate to contact us at [secretariat@dtif.org](mailto:secretariat@dtif.org).

#### **1. Do you have any comments on the draft Guidance on the Operation of the Digital Securities Sandbox (Appendix A)?**

The DTI Foundation believes it is valuable for the Bank of England and FCA to foster the adoption of globally recognised industry standards to facilitate the efficient exchange of information across a Digital Securities Depository (DSD), supervisory authorities, and broader market participants. In particular, the Bank of England and FCA may consider the DTI as a complementary standard alongside other ISO standards mandated by regulators in traditional finance (e.g. ISIN, CFI, LEI), for data such as record-keeping and transparency reporting for DLT-based securities. The following sections outline how the DTI supports the identification of DLT-based securities and the broader policy objectives of the UK in implementing the DSS.

##### ***DTI standard for token identification***

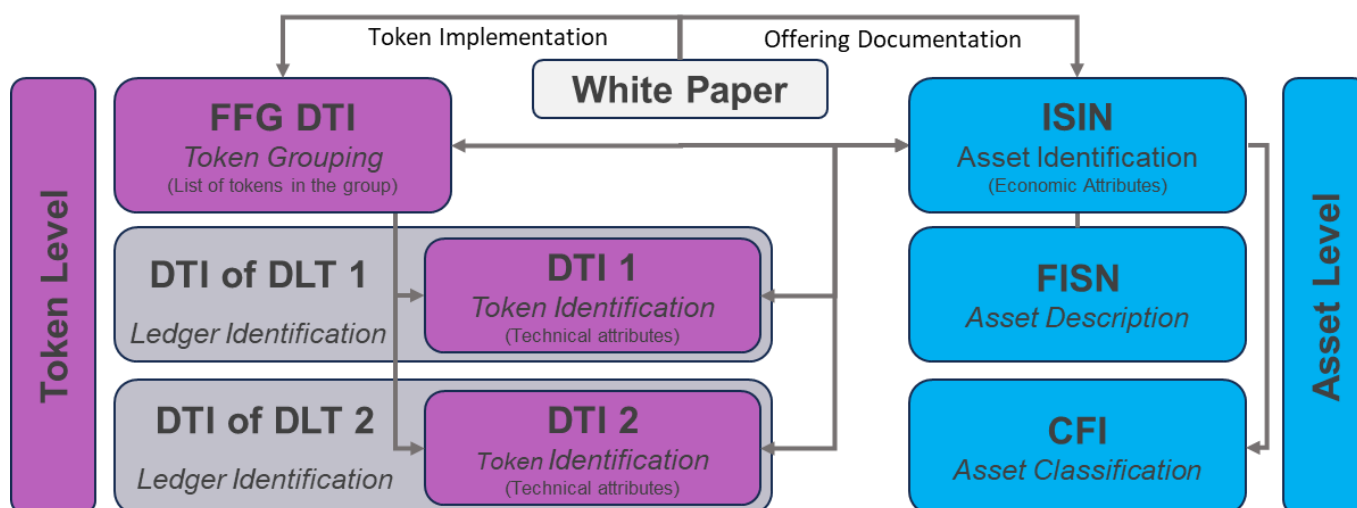
Implementation of common standards, which are open and agnostic to the technical implementation of any digital asset technology, should be prioritised by DSS participants and regulators. The use of the DTI for the common representation of digital asset tokens would provide benefits to all parties. The DTI uniquely identifies a cryptoasset (e.g. a tokenised bond or a digital token) and unambiguously links it to the distributed ledger it is deployed on. Specifically, the DTI provides:

- *A link between an asset and DLT network(s)*: The DTI uniquely identifies and links cryptoassets with their respective DLT network, allowing market participants and regulators to understand and monitor network risks for each cryptoasset. For example, a DLT-based security may be issued on multiple DLT networks – an International Securities Identification Number (ISIN), issued by the Association of National Numbering Agencies (ANNA), provides asset-level identification while a DTI provides the token implementation level. Authorities with a DTI will also more easily identify market impacts based on any operational outages or similar events. The combination of ISIN and DTI allows market stakeholders to accurately identify and assess DLT-based securities from an operational and risk management perspective – see also Figure 1.
- *Assessment of market shock events*: Authorities can better understand the impact on market participants and the market in the event a blockchain suffers an operational outage, such as:
  - the financial instruments at risk, for example, when Polygon had a performance degradation in February 2023 it was unclear which financial instruments - and how many - were impacted; and
  - the individual trades at risk, for example, when Terra stopped producing new blocks, all settlement on that blockchain was effectively halted.
- *Alignment with internationally recognised standards*: Alignment of the DSS, and potential future framework, with global standards would be welcomed by stakeholders engaged in cross-border activities. Additionally, the UK may consider exploring the benefits of early adoption, including the potential to capture a larger market share in digital asset investments and activities. The ISO 24165 DTI standard is recognised as the global standard for the identification of digital tokens, including security tokens, and is being increasingly adopted by market stakeholders and recognised by regulators<sup>3</sup>. For instance, the European Securities and Markets Authority (ESMA) has recommended the use of the DTI under the EU’s DLT Pilot Regime for transaction reporting of DLT-based securities which went live on 23 March 2023<sup>4</sup>.
- *DTI as a non-fiat unit of value*: A DTI code can be leveraged as a unit of value for price and quantity of a transaction utilising a non-fiat form of digital cash for settlement. The identification of a non-fiat alternative may need to be captured as a reference point for future record-keeping or reporting requirements in the absence of other forms of on-chain settlement such as a DLT-based wholesale CBDC.

### Figure 1. Identification of token implementation with DTI

<sup>3</sup> Use cases: [DTI Integration and Adoption](#)

<sup>4</sup> [esma70-460-111 report on the dlt pilot regime.pdf \(europa.eu\)](#) (See page 54)



An overview of the ISO family of standards for identification, naming and taxonomy of all tokenised assets is shown in the above diagram. The DTI Foundation is already collaborating with ANNA (registered Registration Authority for ISIN) to ensure that ISIN and DTI codes are complementary and interoperable. A combination of DTI (technical token/DLT characteristics), ISIN (economic attributes of an asset) and CFI (taxonomy and classification) will provide all the information requirements for market participants. The DTI provides a further layer of transparency to the DLT implementation while maintaining continuity and consistency with traditional finance attributes.

The DTI is agnostic to the technical implementation of the distributed ledger, with token reference data available for both public and private blockchains. It is also used to represent a wide range of cryptoassets – tokenised and native financial instruments represented as security tokens, stablecoins and other asset-based tokens, e-money tokens, cryptocurrencies, utility tokens, and digital or virtual assets.

All DTI reference data is accessible via the DTI Registry. The DTI Foundation offers a free service to download a historical snapshot of the entire DTI registry in JSON format. Daily incremental files and API connectivity services are also available. For cryptoassets not yet captured by the DTI registry, any stakeholder can submit a request via the DTI webpage to create a DTI code for new or emerging ledgers and tokens quickly and efficiently to maintain standardised identification.

The DTI Foundation welcomes industry stakeholders to engage with the development of the ISO 24165 standard. ISO 24165 was developed by the ISO [subcommittee SC 8 Reference data for financial services](#) of the ISO/TC 68 *Financial Services* technical committee as a new standard to address the need to identify cryptoassets issued, traded, settled or stored across distributed ledger networks. The DTI Foundation's PAC aims to ensure the standard is consistent with evolving market and regulatory requirements. Stakeholders are encouraged to apply to join the PAC.

We are available to answer any questions you may have and would welcome the opportunity to discuss the ISO 24165 DTI standard further with the UK Government. Please do not hesitate to contact us at [secretariat@dtif.org](mailto:secretariat@dtif.org).