



## Digital Token Identifier Foundation (DTIF)

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

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Dear Sir / Madam,

### Consultation on the first Financial Market Infrastructure Sandbox: The Digital Securities Sandbox

The [Digital Token Identifier Foundation \(DTIF\)](#)<sup>1</sup> welcomes the opportunity to respond to HM Treasury's 'Consultation on the first Financial Market Infrastructure Sandbox: The Digital Securities Sandbox' (hereafter called the 'consultation') on the expected functioning of the Digital Securities Sandbox (DSS).

The DTIF 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 digital asset technology (such as distributed ledger technology) for token issuance, storage, exchange, a record of ownership, or transaction validation. The DTI itself comprises a code, which is a random, unique combination of nine alphanumeric characters allocated to a digital token, and a record of data relevant to that token (the reference data) is held within the DTIF Registry. 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 DTIF's mission is to provide the definitive source reference data for the unique identification of digital tokens. The DTIF issues and maintains DTIs on a non-profit basis, with the aim of increasing 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.

The DTIF welcomes the objective of the DSS to facilitate the testing and adoption of digital securities across financial markets. The DTIF agrees with HM Treasury's observations on reporting, cross-industry collaboration, and international coordination. The DTI ISO standard was established to enhance efficiencies within the crypto-asset market and assist regulators and market participants manage risks

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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)

through greater transparency. In particular, the use of the DTI, a globally consistent identification standard for digital tokens, addresses various points raised within the consultation report. This includes:

- **3.9:** *'Key to the usefulness of regulatory reporting...is consistency and the ability for regulators to amalgamate data from different sources.'* Pre-and post-trade disclosure requirements in traditional financial markets are facilitated using globally recognised identifiers tailored to financial instruments and markets (such as ISO 6166 International Securities Identification Numbers (ISINs) and ISO 10383 Market Identifier Codes (MICs)). The European Securities and Markets Authority (ESMA) has recommended National Competent Authorities (NCAs) require that DTI is used alongside the ISIN, under the European Union's DLT Pilot Regime which went live on 23 March 2023<sup>3</sup>. The DTIF proposes HM Treasury consider the benefits of the DTI as an additional reporting mechanism to support market integrity and investor protection for those digital asset markets covered within the DSS.
- **3.16:** *'Different entities may employ different technologies and practices, which may have various implications for policymaking across the sector. The ability of the wider market to understand what is happening in the DSS will be important, particularly to enable wider market coordination on the adoption of digital technology.'* It will be important for DSS participants and regulators to follow industry standards and best practices when managing data and information. The use of recognised standards will facilitate efficient information exchange and interoperability while preventing unnecessary fragmentation of digital asset markets. See our response to question 32 for further information.
- **3.17:** *'This is likely to include the building of common standards, which may be particularly important in the context of facilitating interoperability, given that without action the appearance of multiple FMIs using digital asset technology could fragment liquidity. Interoperability may be needed between new FMIs not only, but also between new FMIs and legacy systems.'* 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. See our response to question 32 for further information.
- **3.21:** *'The regulation of digital assets and technologies is a developing issue across multiple jurisdictions. Eventually the UK framework will need to be globally consistent and based on global standards to sufficiently mitigate risks and support the competitiveness of the UK.'* Alignment of the UK 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

<sup>3</sup> [esma70-460-111 report on the dlt pilot regime.pdf \(europa.eu\)](https://esma70-460-111-report-on-the-dlt-pilot-regime.pdf(europa.eu))

potential to capture a larger market share in digital asset investments and activities. See our response to question 35 for further information.

We have confined our responses to questions 32 and 35 as these are directly relevant to the DTIF's remit.

We are 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).

### **32. How should information regarding DSS activity be shared with the wider financial services sector?**

DTIF considers it to be important for DSS participants and regulators to follow industry standards and best practices when managing data and information. The use of recognised standards will facilitate efficient information exchange and interoperability across participants and market infrastructure while preventing unnecessary fragmentation of digital asset markets.

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 crypto-asset (e.g. a tokenized bond or a digital token) and unambiguously links it to the distributed ledger it is deployed on. Specifically, the DTI enables regulators to:

- Establish a connection between an individual token and traditional asset identifiers, such as an International Securities Identification Number (ISIN), issued by the Association of National Numbering Agencies (ANNA).
- Identify market impacts in the event a blockchain experiences any operational outage or similar event.
- Detect market abuse through the identification of market activity and irregular suspicious patterns.

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 crypto-assets – tokenized and native financial instruments represented as security tokens, e-money tokens and asset-based tokens, cryptocurrencies, utility tokens, and digital or virtual assets in line with the broad term of ‘cryptoasset’ defined within the consultation paper.

### **35. What frictions might hinder the use of digital assets on a cross-border basis?**

The DTIF agrees with HM Treasury’s remarks in section 3.21 that the UK framework for the regulation of digital assets and technologies will need to be globally consistent and based on global standards to mitigate risk and support jurisdictional competitiveness. Various frictions might hinder the use of digital assets on a cross-border basis, the key among them is the lack of consistent standards on the identification of DLTs and digital assets.

Internationally-recognised ISO standards, such as ISO 6166, ISO 17442, and ISO 10383 for defining ISINs, LEIs, and MICs respectively, have proven effective in establishing a harmonised framework of

identification for regulators, market participants and infrastructure providers. The DTI is a globally recognised ISO standard to identify DLTs and digital tokens represented on digital asset technology. As noted above, the European Securities and Markets Authority (ESMA) has recommended NCAs require DTI use alongside the ISIN, under the European Union's DLT Pilot Regime. The use of DTIs can improve cross-border digital asset activities and enhance cooperation among authorities:

1. **Clear and unique identification of digital assets:** While identifiers such as ISIN have provided identification of traditional securities, the DTI provides a clear identification for a digital token when distributed ledger technology is used for securities issuance, trading, settlement or storage. The DTI also replaces the unofficial "ticker" symbols commonly used in the cryptoasset industry, resolving previous ambiguity and confusion. For instance, the USDP ticker has been claimed by at least two market participants, while the BTC ticker has seen multiple communities asserting ownership following various Bitcoin forks. Additionally, ambiguity persists around the ticker for Bitcoin itself - BTC or XBT.
2. **Clear and unique identification of DLTs:** The DTI also provides a unique identification for each DLT (public or private) based on its technical, verifiable data. Regulators and market participants will need to assess risks associated with a DLT where the digital asset is traded, settled and/or stored. Consistent identification of underlying distributed ledgers will be key for the market and regulators to analyse and mitigate these risks.
3. **Enhanced transparency across DLTs:** The DTI standard facilitates the grouping of equivalent digital tokens into a Functionally Fungible Group when they represent the same digital asset. This capability allows the DTI to support the effective monitoring of cross-border/cross-ledger token issuance and trading activities. A harmonised identification method will help regulators more effectively identify potential risks and prompt intervention actions when required.
4. **On-chain and off-chain interoperability:** The DTI standard allows digital assets to be mapped to traditional financial identifiers such as ISIN. Authorities and market participants can easily cross-reference and verify token data with the DTI Registry to understand the link to the assets in the traditional markets (if applicable).