



## Digital Token Identifier Foundation (DTIF)

✉ [secretariat@dtif.org](mailto:secretariat@dtif.org)  
19 September 2023

Dear Sir / Madam,

### Consultation on regulatory capital and liquidity treatment of crypto-asset exposures

The [Digital Token Identifier Foundation \(DTIF\)](#)<sup>1</sup> welcomes the opportunity to respond to the Office of the Superintendent of Financial Institutions' consultation on proposed changes to regulatory capital and liquidity treatment of crypto-asset exposures, as set out within the two draft guidelines<sup>2</sup> ('the guidelines') for federally regulated deposit-taking institutions and insurers.

The DTIF is the Registration Authority for the International Organization for Standardization (ISO) 24165 Digital Token Identifier (DTI) standard<sup>3</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 consists of a randomly generated, unique combination of nine alphanumeric characters assigned to a digital token. The code maps to a record of reference data, which 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, to increase transparency in the digital asset space by creating a core reference data set based on open data principles and making it 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> OSFI guidelines on the regulatory capital and liquidity treatment of crypto-asset exposures ([Banking](#) and [Insurance](#))

<sup>3</sup> [ISO 24165-1:2021](#) and [ISO 24165-2:2021](#), Digital token identifier (DTI)

The DTIF recognises that these draft guidelines aim to update the OSFI’s approach to regulatory capital and liquidity requirements of crypto-asset exposures to the Basel Committee on Banking Supervision’s standard published in December 2022. The DTIF believes it is valuable for the OSFI and its regulated entities to be aware of the potential benefits of the use of the DTI by banks, insurers, and other crypto-asset stakeholders to support the principles and requirements set out in the BCBS standards and OSFI guidelines.

The following sections outline how the DTI supports (i) the classification of DLT networks and digital tokens and (ii) the assessment of risks associated with crypto-asset technology.

### ***DTI supports classification of DLT networks and digital tokens***

A standardised form of identification will facilitate the consistent classification of DLT networks and digital tokens across federally regulated deposit-taking institutions, insurers, regulators, and other stakeholders involved in digital asset markets. The DTI is a globally recognised ISO standard that provides guaranteed uniqueness of digital tokens and DLT networks based on objective and verifiable technical data across different platforms, systems, and jurisdictions.

- ***DLT networks:*** In the crypto-asset market, a digital asset may be issued on multiple DLTs and traded or settled on multiple DLT market infrastructures. The 2017 BIS CPMI report on distributed ledger technology in payment, clearing and settlement identified several DLT-specific risks<sup>4</sup> - each DLT network has a different combination of these risks. The DTI uniquely identifies and links crypto-assets with their respective DLT network, allowing market participants and regulators to understand and monitor network risks for each crypto-asset. For example, the TetherUSD DTI on the Ethereum network (2QWSBDMNC) links to the Ethereum ledger identifier, and the TetherUSD DTI on the TRON network (C9N6ZVN7S) links to the TRON ledger identifier.
- ***Digital Tokens:*** Crypto-asset names are not standardised or unique across crypto exchanges, therefore, any disclosures should relate to a global standard, such as the DTI, to ensure clarity and avoid confusion. As an example, names such as “BTC” or “Bitcoin” lack clarity as numerous tokens share these designations. By uniquely identifying each token through its technical specifications, the DTI can assist market participants in verifying that they are holding and comparing the same crypto-asset. Bitcoin has been issued a DTI of 4H95J0R2X, which, with the use of fork records, uniquely distinguishes it from any historical Bitcoin forks such as Bitcoin Cash, Bitcoin Gold, Bitcoin

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<sup>4</sup>[BIS CPMI report](#) (2017). DLT-specific risks: operational and security risks, settlement issues, legal risks, governance, data management and protection

SV, and others. Additionally, the DTI establishes a link to any underlying asset identifier (such as a tokenised bond's ISO 6166 International Securities Identifier Number (ISIN)<sup>5</sup>).

In the case of multiple DLT financial instruments across different DLT networks that are deemed to be functionally fungible, a DTI can be issued to represent the group of tokens. The DTI in this case can enhance market transparency by enabling aggregation of the order and market data across multiple chains across the functionally fungible tokens.

### ***DTI supports crypto-asset risk assessments***

Reference data linked to the DTI could help market participants and regulators assess risks associated with crypto-asset technology, as set out under 4.4 and 4.5 of Annex 4 within the Insurer and Bank risk management guidelines respectively. Technical information captured by the DTI Registry to support such assessments includes, among others:

- *Protocols*: The mechanism/protocol used to create a digital token, such as ERC-20 used for Ethereum.
- *Public distributed ledger indicator*: Whether access to reading the distributed ledger is unrestricted (versus private/permissioned) – whether the data elements specified in the DTI Registry are accessible for independent verification by the general public.
- *Fork information*: If a hard fork were to occur on the chain where a DLT financial instrument resides, the original token would have new 'copies' on both forks. It is important to unambiguously identify which fork and token represents the 'original' DLT financial instrument. The DTI can perform this identification because, following a hard code, each 'copy' of the token will receive its own DTI, thereby allowing unambiguous identification of which token is the 'real' DLT financial instrument.

The DTIF would note also that it is open to capturing additional details based on market and regulatory demand.

If regulators need to configure their systems to consume data directly from the chain, these systems will need to understand the relationship between the DLT financial instrument and the associated chain(s) on which the transaction data resides. The DTI metadata provides a link between the DLT financial instrument and the chain(s) where the token is implemented, thereby providing a machine-readable mechanism to identify which chain(s) the transaction data will be available on. The DTI is agnostic to the technical

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<sup>5</sup> International Securities Identifier Number (ISIN) is an ISO 6166 standard to uniquely identify a security

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 ‘crypto-asset’ defined within the guidelines.

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).