

ISO 24165 DIGITAL TOKEN IDENTIFIER Implementation Plans

19 February 2021



WHAT IS ISO 24165 DTI?

ISO TC68 SC8 WG3 has produced a draft standard for **identifying digital tokens**, with the publication of the standard expected by end 2021.

The purpose of the DTI is to address the demands of exchanges, custodians, financial institutions, and regulatory authorities for **a registry and identifier assignment process** for digital tokens.

The key principles behind the DTI include:

- The identifier will be **random, unique and fixed-length** (8 characters plus checksum)
- Registration eligibility is based on **objective, verifiable information** provided by the applicant
- The assignment of the identifier offers no warranty on the features, purpose, compliance to any regulation, or value of the digital token
- The **identifier is assigned to the token**, not registered to the applicant

The scope of DTI issuance is **all fungible digital assets which use distributed ledger technology** for their issuance, storage, exchange, record of ownership, or transaction validation and are not a currency.

IDENTIFICATION METHOD

KEY CONSIDERATIONS

- 1 Identification of the digital token is based on verifiable and unique data about the digital token.
- 2 Uniqueness criterion is based on the digital token's origins on the distributed ledger data structure.
- 3 Forks are catered for by including specific fork information within the uniqueness criterion, to distinguish between the original digital token and the newly created token(s).



EXAMPLE: BITCOIN

Normative	Genesis Block Hash	000000000019d6689c085ae165831e934ff763ae46a2a6c172b3f1b60a8ce26f
Normative	Genesis Block Hash Algorithm	SHA-256
Normative	Genesis Block UTC Timestamp	2009-01-03T18:15:05
Informative	DT Long Name	Bitcoin
Informative	DT Short Names	BTC
Informative	DT Reference Implementation URL	https://github.com/bitcoin/bitcoin
Informative	DT Unit Multiplier	100000000

Legend:

M Mandatory

O Optional

C Conditional

DT = Digital Token

DLT = Distributed Ledger Type

EXAMPLE: BITCOIN CASH

Normative	Genesis Block Hash	000000000019d6689c085ae165831e934ff763ae46a2a6c172b3f1b60a8ce26f
Normative	Genesis Block Hash Algorithm	SHA-256
Normative	Genesis Block UTC Timestamp	2009-01-03T18:15:05
Informative	DT Long Name	Bitcoin Cash
Informative	DT Short Names	BCH
Informative	DT Reference Implementation URL	https://github.com/Bitcoin-ABC/bitcoin-abc
Informative	DT Unit Multiplier	100000000

Fork: Normative	Reference to base record the fork record modifies	DTI of Bitcoin
Fork: Normative	Fork Block Height	478559
Fork: Normative	Fork Block UTC Timestamp	2017-08-01 18:12:41
Fork: Normative	Fork Block Hash	000000000000000000000000651ef99cb9fcbe0dadde1d424bd9f15ff20136191a5eec
Fork: Normative	Fork Block Hash Algorithm	SHA-256

Legend:

M Mandatory

O Optional

C Conditional

DT = Digital Token

DLT = Distributed Ledger Type

DATA ELEMENTS

Data Elements	DTI Type	1=Native token	2=DLT without native token	1=Native token	2=DLT without native token	0=Auxiliary Token	3=functionally fungible group of digital tokens
	DLT Type	1=Blockchain	1=Blockchain	0=Other	0=Other	N/A	N/A
Normative	Auxiliary DT Mechanism	N/A	N/A	N/A	N/A	M	N/A
Normative	Auxiliary DT Distribution Ledger	N/A	N/A	N/A	N/A	M	N/A
Normative	Auxiliary DT Technical Reference	N/A	N/A	N/A	N/A	M	N/A
Normative	Genesis Block Hash	M	M	N/A	N/A	N/A	N/A
Normative	Genesis Block Hash Algorithm	M	M	N/A	N/A	N/A	N/A
Normative	Genesis Block UTC Timestamp	C	C	N/A	N/A	N/A	N/A
Normative	Functionally Fungible DTIs List	N/A	N/A	N/A	N/A	N/A	M
Informative	DT Long Name	M	M	M	M	M	M
Informative	Original Language DT Long Name	O	O	O	O	O	O
Informative	DT Short Names	O	N/A	O	N/A	O	O
Informative	Original Language DT Short Names	O	N/A	O	N/A	O	O
Informative	Underlying Asset External Identifiers Type	C	N/A	N/A	C	C	C
Informative	Underlying Asset External Identifiers Value	O	N/A	O	N/A	O	O
Informative	DT External Identifiers Type	C	N/A	N/A	C	C	C
Informative	DT External Identifiers Value	O	N/A	O	N/A	O	O
Informative	DT Reference Implementation URL	O	O	O	O	N/A	N/A
Informative	DT Unit Multiplier	M	N/A	M	N/A	M	N/A
Informative	Public Distribution Ledger Indicator	M	M	M	M	N/A	N/A

Legend:

M Mandatory

O Optional

C Conditional

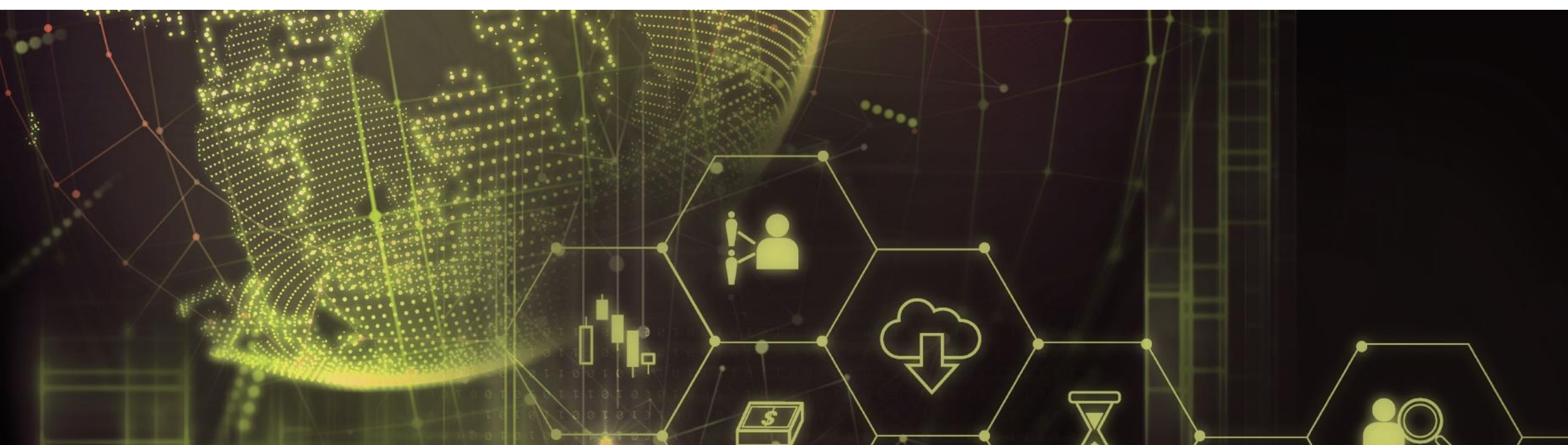
DT = Digital Token

DLT = Distributed Ledger Type

Fork: Normative	A reference to the base record the fork record modifies	M	M	N/A	N/A		
Fork: Normative	Fork Block Height	M	M	N/A	N/A		
Fork: Normative	Fork Block UTC Timestamp	C	C	N/A	N/A		
Fork: Normative	Fork Block Hash	M	M	N/A	N/A		
Fork: Normative	Fork Block Hash Algorithm	M	M	N/A	N/A		
Fork: Normative	Consensus mechanism change response	M	M	N/A	N/A		
Fork: Normative	Digital token creation response	M	N/A	N/A	N/A		

IMPLEMENTATION TIMELINES

- The standard is currently in draft, with publication expected **Q3 2021**.
- DTI issuance is anticipated to **start simultaneously with the publication of the standard**.
- Possibility of **soft launch mid 2021** if needed to meet any urgent industry or regulatory needs.
- **Product Advisory Committee** being formed to provide industry stakeholders a formal say in the governance of the service



STAKEHOLDER ENGAGEMENT TIMELINES

Q2 2021

- Call for participation in Product Advisory Committee

Q3 2021

- Product Advisory Committee operational
- Potential soft service launch

Q4 2021

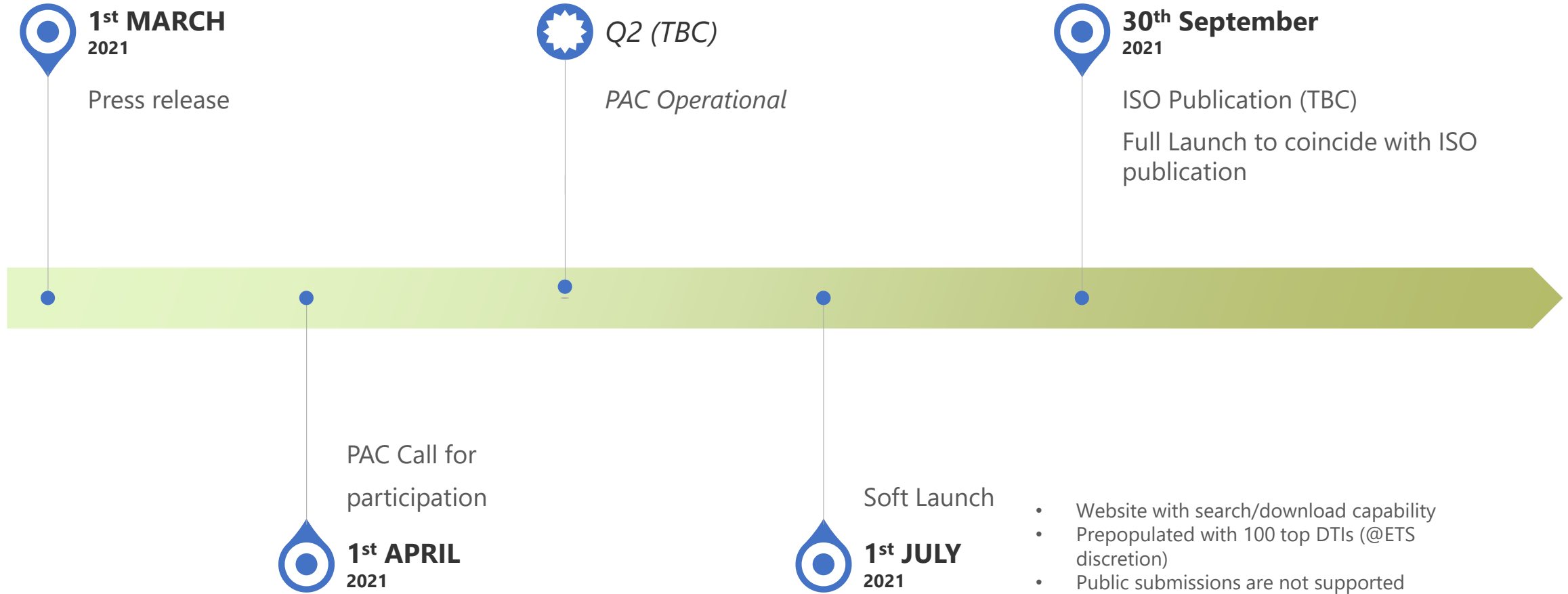
- Taskforces to explore synergies with other identifiers, including ISIN and ITIN
- Formal service launch

2022

- Technology Advisory Committee operational



PROPOSED TIMELINE



PRODUCT ADVISORY COMMITTEE

The Purpose

- Provide **recommendations to ISO** for the evolution of the DTI data records
- Provide **recommendations to Etrading Software** on the implementation guidelines for the DTI
- **Arbitrate on disputes** related to DTI issuance



The Key Governance Principles

- **Consensus-based decision-making** – focus on reaching unanimity on decisions, or failing that, on providing space for minority opinions to be expressed alongside majority recommendations
- **Public agendas and minutes** – and potentially occasional public deliberations
- **Diversity of representation** – to ensure balanced decision making across the stakeholder community

PRODUCT ADVISORY COMMITTEE - APPROACH

Key Objectives

1. Provide product stewardship to ETS Board
2. Provide advice on application and utilization of DTIs
3. Advise ETS on the implementation of future product enhancements

Scope

1. Submit reports and recommendations to ETS Board
 - a. Definition of products and how they are supported
 - b. Existing and future industry use cases
 - c. Issuance service support including communication with users and dispute resolution
2. Review service/markets metrics for DTIs
 - a. Data quality metrics
 - b. Service availability metrics
 - c. Number of applications and resolution time



PRODUCT ADVISORY COMMITTEE – MEMBERSHIP

1. Meeting frequency
 - a. At least once a month, more frequently as required prior to launch
 - b. 2-year scope
2. Number of members: up to 20
3. Aim for diversity of industry participant types
4. Aim for a balanced geographic representation from US, EMEA and Asia.
5. Membership based on the organization rather than individual

INDUSTRY INPUT REQUIRED

NEXT STEPS

- Identify stakeholders with a requirement for a soft launch in mid 2021
 - Work with such stakeholders to understand their requirements and to shape a soft service launch that meets their requirements for mid 2021
- Publish draft terms of reference for Product Advisory Committee (“the Charter”)
 - Work with key stakeholders to finalize the Charter
 - Launch call for participation on Product Advisory Committee after finalization of the Charter



Questions?

etradingsoftware

connecting the market

Etrading Software Ltd

Cannon Place, 78 Cannon Street
London EC4N 6HL
UNITED KINGDOM

Email: info@etradingsoftware.com
Web: www.etradingsoftware.com
Tel: +44 (0)20 3880 2200