

# **ISO 24165 DIGITAL TOKEN IDENTIFIER PRODUCT ADVISORY COMMITTEE**

09 September 2021

# AGENDA

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# GOVERNANCE

## 2.1 GOVERNANCE: Competition Law Reminder

The purpose of this protocol is to remind attendees of DTIF meetings, including the Board, that all discussions at such meetings are subject to the application of EU, UK and other applicable national competition law (“Competition Law”).

Individual attendees are responsible for observing the requirements of Competition Law and should make themselves familiar with their legal obligations and their own organization policies. DTIF is committed to compliance with Competition Law, so to ensure that all meetings remain in compliance with Competition Law, we advise that all attendees follow the guidance set out below.

- A meeting agenda will be circulated in advance of a meeting. Any objections to, or potential concerns about, the proposed agenda in relation to Competition Law compliance should be raised prior to the meeting if practicable
- Attendees must stick to the prepared agenda during the meeting and avoid discussion about other topics
- Attendees must not seek, discuss, communicate or exchange any commercially or other business sensitive information about their organization or relating to competitors (whether before, during or after meetings). This includes, for example, any non-public information relating to prices, costs, revenues, business plans/marketing activities, individual terms and conditions, risk appetite or any other information which is likely to reduce strategic uncertainty in the market (i.e. which might result in less intensive competition than would normally occur)
- Attendees must not reach any sort of agreement or understanding that is unlawful due to competition law (e.g. unlawful horizontal agreement, unlawful vertical agreement)
- The PAC Secretariat will take minutes of the meeting, and supply these to each attendee in due course.
- If the Chair considers that a discussion at the meeting may be inappropriate from a Competition Law perspective, he or she shall raise an objection and promptly bring that part of the discussion to an end. If another attendee is concerned about a discussion from a Competition Law perspective, he or she shall bring it to the attention of the Chair, who will promptly bring that part of the discussion to an end. If other attendees attempt to continue that discussion, the Chair shall bring the meeting to an end. Every attendee is allowed to immediately leave the meeting in such situations. All these situations must be properly recorded in the minutes
- The minutes of the meeting must subsequently be read and approved by the attendees. If any matter discussed is not recorded in the minutes, or is recorded incorrectly, any attendee may raise an objection in writing and request an amendment.
- Similar principles should be observed for any group email exchanges or other online group discussions operated by DTIF.

We remind attendees that breaching Competition Law has serious potential consequences for them as individuals and their organizations. Such consequences may include heavy fines, liability to pay compensation to affected individuals and businesses and, in certain cases, the imposition of criminal penalties, director disqualification orders and disciplinary action.

## 2.2 GOVERNANCE: Previous Minutes & Open Actions

Minutes from previous meeting



Microsoft Word  
Document

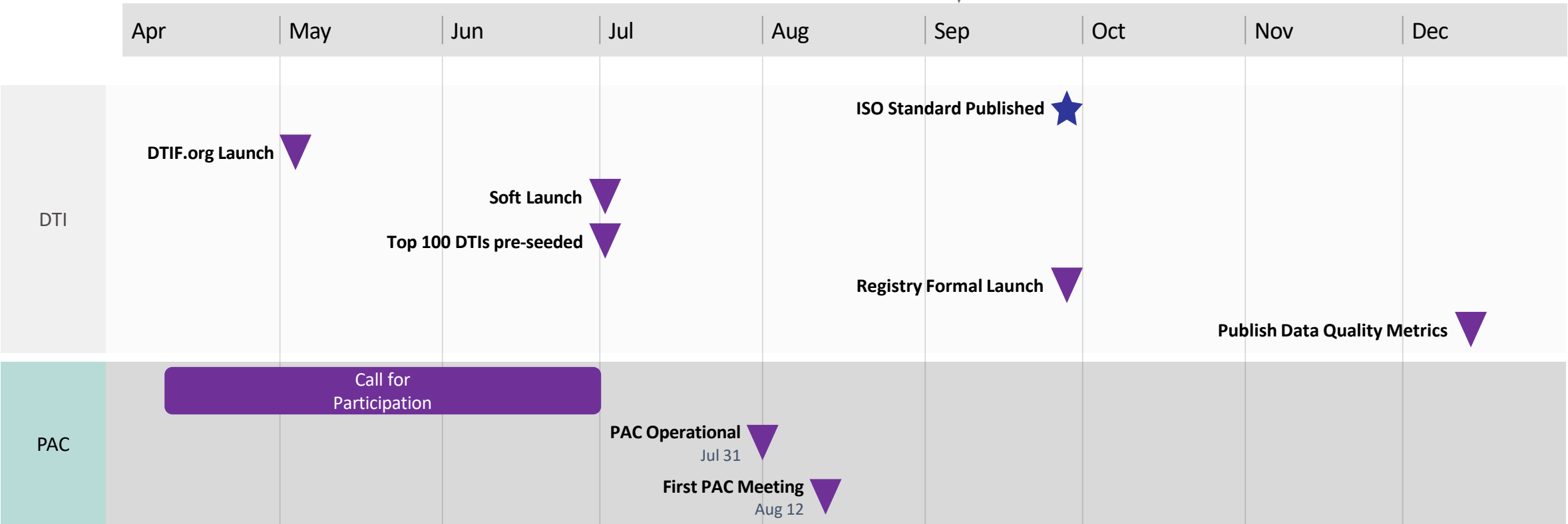
### Open Actions

Ref	Action	Owner	Target	Status
130821-01	Distribute the press release draft to PAC members	DEO	17-Aug-21	Propose to close
130821-02	Form technical sub-committee	Chair	07-Sep-21	Propose to close

# STATUS

# 3.1 STATUS: Timeline and Milestones

Today



## 3.2 STATUS: Updates

- Acceptance of user submissions for registration of tokens
  - Starting end of Sep to coincide with the standard being launched
- Data Quality Metric
  - Working on identifying key metrics for data quality
  - Seeking feedback on ISO requirements
  - Proposal will be discussed in October meeting
- Ongoing research
  - Examples of bonds issued on distributed ledgers, e.g. EIB, Santander, World Bank

## 3.3 STATUS: Proposal for Additions to DTI Registry for October

- Maintain top 100 tokens by market capitalisation
- Add and maintain top 100 tokens by trading volume
  - Analysis from 8<sup>th</sup> August: 73 tokens already assigned DTI as part of earlier exercise
- Add Stablecoins to registry
  - Approximately 140 tokens identified
  - Stablecoin definition varies among regulators and data aggregators
  - 9 Stablecoins already assigned a DTI as part of earlier exercise

# DTI USE CASES

## 4.1 DTI USE CASES

### ○ Legal Definitions and Contracts

- A contract: "I agree to sell such-and-such car to John Doe for 1.5 Bitcoin."
  - A dishonest buyer could pay in Bitcoin Cash or Bitcoin SV, claim it is Bitcoin, and sue.
  - With no defined issuer of Bitcoin, who is the arbiter of what is a Bitcoin? Who will a court believe?
- A better contract: "I agree to sell such-and-such car to John Doe for 1.5 Bitcoin, as defined by the ISO 24165 Digital Token Identifier standard as 4H95J0R2X."
  - Linked to a technically unambiguous Normative definition that excludes Bitcoin Cash and Bitcoin SV.
  - "What is the real Bitcoin?" is irrelevant to the contract; people with differing opinions can still transact using DTI.

## 4.1 DTI USE CASES (Continued)

- Exchanges
- Custodians
- Regulatory reporting
  - MiFID II etc
- Tax reporting
- Market transparency

# STANDARD WALKTHROUGH

## 5.1 STANDARD WALKTHROUGH: Aims of WG3

- As an ISO standard, we must avoid subjective judgment calls as much as possible.
- We must avoid a revolving door of disputes around subjective issues.
- Normative Data is objectively true.
  - Includes technical data like Genesis Block Hash, fork history with hashes.
  - No technical experts should ever disagree on Normative data. If they do, one is wrong.
- Identities of tokens (in the form of Long Name, Short Name) must be Informative.
  - Given that an Issuer may not exist, could this ever be "proven"?
  - Parties disagreeing on names can still use this standard - because they agree on the Normative data like Genesis Block Hash
  - The RA can allow multiple registrations for Bitcoin without conferring "legitimacy" on any one or having to arbitrate "What is the real Bitcoin?"

## 5.2 STANDARD WALKTHROUGH: Core Philosophy

### Asset Level

- The business concept of something that holds value.
- This probably could be defined in a Normative manner for tokens issued by registered, regulated entities (e.g. Security Tokens)
- For decentralized assets, it is impossible to make a normative definition in the absence of any universally recognized authority
- The DTI standard avoids ANY normative registration based on Assets
  - It's clear many significant tokens, like Bitcoin, can never have a Normative asset definition
  - The DTI standard does allow linking to external asset identifiers, but this link is Informative

## 5.2 STANDARD WALKTHROUGH: Core Philosophy

### Token Level

- Low level, technical definition that is objectively true, and can be referenced by Normative data
- Most assets map 1:1 to tokens.
- The DTI standard focuses exclusively on the Token level

## 5.2 STANDARD WALKTHROUGH: Core Philosophy (Continued)

### The Fundamental Paradox

- The DTI standard does not say "This is the real Bitcoin" e.g. the Bitcoin asset
- The DTI standard only identifies and differentiates Tokens
- It falls on the Users of the DTI to map assets to tokens, e.g. "The asset I consider as Bitcoin is DTI 4H95J0R2X."
- If users have different asset to token maps, the DTI still allows them to do business.
  - E.g. "I believe the asset Bitcoin is really DTI 2L8HS2MNP, but we are both agreeing to transfer 1.5 tokens represented by DTI 4H95J0R2X in exchange for a car."

## 5.3 STANDARD WALKTHROUGH: Walkthrough

## 5.4 STANDARD WALKTHROUGH: Challenges

Industry would probably prefer an Asset based standard

- ... aside from the fact one cannot make a Normative definition of most major digital assets
- This is evident with USD Tether - it is one asset, but many auxiliary tokens on different blockchains, and exchanges list it as one symbol
- A "Functionally Fungible Group" is our loophole to group token-level DTI's into a single DTI for the benefit of users
  - An Asset based approach would be better here, but we have no good way to do it, so this was the best compromise that met user needs

## 5.4 STANDARD WALKTHROUGH: Challenges (Continued)

Digital Token Identifier Type = distributed ledger without a native digital token

- This is unusual as it is a DTI that is not a token, can't be owned or traded, etc.
- Usually, there is a 1:1 mapping between distributed ledgers and native tokens.
- The standard uses the DTI to do double duty as a distributed ledger identifier when registering auxiliary tokens.
- For cases where there is 0 or >1 native token, and we need to register auxiliary tokens, we must issue this kind of “phantom” DTI to identify the distributed ledger in addition to DTIs for the tokens.
- Assigning both Distributed Ledger Identifiers and Digital Token Identifiers may be more “pure” but it was deemed too complex.

## 5.4 STANDARD WALKTHROUGH: Challenges (Continued)

### Distributed Ledger Technology Type = Other

- Category for non-blockchain tokens still using DLT
- Example: IOTA (uses a Tangle - a Directed Acyclic Graph)
- No normative registration data exists for these; it's purely a subjective name
- WG3 believed normative technical data exists - but WG3 didn't have the technical expertise or time to identify it.
- Ideally, the PAC closes gaps by defining the Normative data for classes of non-blockchain DLTs, the standard is updated, and the registration data gets amended to include it.

## 5.4 STANDARD WALKTHROUGH: Challenges (Continued)

We still have a point of subjective value judgments for dispute – Forks

- Following a contentious Fork, which token keeps the original DTI and which gets a new one is subjective.
- No objective algorithm can determine this. (e.g. Bitcoin Cash changed consensus rules from Bitcoin, but Ethereum Classic kept theirs the same.)
- The issue is not critical for tokens that forked prior to the Registry launch - each will get their own DTI assigned.
- The issue is critical if a DTI is in use, a fork occurs, and there is a controversy over which token keeps the original DTI.
- Fortunately, these issues do tend to get settled by community consensus... eventually (e.g. Bitcoin SV)

**AOB**

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