FDTF Call Notes

*10 August 2021*

# Attendees

* Mike Bennett
* Pete Rivett
* Terrance Milligan
* Bobbin Teegarden

Apologies: Rob Nehmer

# Agenda

* Money Semantics

# Meeting Notes

## Updates / recent stories

### eKrona

Scam still current – site said still available, as we saw last week. Pete has reported it and the press release has subsequently disappeared from many sites. Also has a presence on Facebook, PR has followed up on that as well.

### Infrastructure Bill

Terrance: Interested in the crypto amendment to the Infrastructure Bill and how that might inhibit technological advancement in that space.

Yesterday Lars Toomre reported that an amendment relating to crypto was rejected and so the text in the Act reverts to what was there before.

There were a couple of amendments of relevance:

* One: Amendment defining what a broker was in the crypto space
* Another: not sure what it is

At least one of these was rejected yesterday and so was not in the text of what was voted on.

Not sure which of the Two Lars was reporting on yesterday.

It was voted on:

<https://www.reuters.com/world/us/us-senate-poised-pass-1-trillion-infrastructure-bill-debate-35-trillion-budget-2021-08-10/>

Presumably without the amendment(s)

This was a Senate vote but it may still be changed in the House later on.

The Infrastructure Bill was a House resolution. It was voted on by the Senate, it now goes to the House.

##### Clarity:

<https://www.finance.senate.gov/imo/media/doc/Wyden%20Lummis%20Toomey%20Crypto%20Amendment.pdf>

This the Lummis / Toomey / Wyden amendment – the one Lars was reporting on. This relates to Brokers.

There is another amendment of relevance to Crypto so we are not aware of the status of that one.

Relates to brokers, including:

A definition!

##### Broker Definition

Definition of Broker (in the rejected one):

1. DEFINITION OF BROKER.—Nothing in this section or the amendments made by this section shall be construed to create any inference that a person described in section 6045(c)(1)(D) of the Internal Revenue Code of 1986, as added by this section, includes any person solely engaged in the business of— 2 GAI21889 9JD S.L.C. (A) validating distributed ledger transactions, (B) selling hardware or software for which the sole function is to permit a person to control private keys which are used for accessing digital assets on a distributed ledger, or (C) developing digital assets or their corresponding protocols for use by other persons, provided that such other persons are not customers of the person developing such assets or protocols.

This would have replaced (for the purposes of the Act) whatever definition is in play more generally.

#### Usage v Origin context on the Broker Definition:

Usage Context: ??

Originating context (reference) = this Act.

(see VCoI approach; 2 kinds of context are identified, for the intended usage of a term and for the context in which the term was defined at origin)

#### Update / Clarity on the Infrastructure Bill:

There were 2 opposing amendments.

These were trying to be combined but this was unsuccessful. Everyone else agreed to it but someone blocked it for an unrelated reason.

That is why the Act went forward without any amendment.

The Wyden-Toomey-Lummis amendment explicitly excludes miners and validators, hardware and software makers, and protocol developers from the definition of a “broker." Whereas, the Portman-Warner-Sinema amendment protects proof of work (PoW) miners from the newly proposed reporting requirements, leaving others open to them.

## Main Agenda – Money and Currency Concepts

### Core Concepts:

*From last week:*

Currency – as a relative thing (anything can be or not be able to perform as money i.e. have currency as money.

Money: means of exchange; store of value

Core concepts:

* Currency
* Means of exchange / store of value
	+ Anything in that role

Kinds of 'money'

* Token based
* Account based

Token:

* Coins
* Notes

Not money but somehow in scope (see e.g. MPesa):

* Payment systems versus tokens or units used in payment.

On token based v account based, what is the ontological nature of the entries on the ledger – given that in most ledgers the numbers are a record of money elsewhere, but if a currency issue is issued partly not as notes / tokens then are these another kind of thing?...

### Money Flower: Where we left it

A set of concepts / abstractions to pull together.

There were 2 things in the MF:

* The petals
* How populated with specific currencies

What we found on those:

**The petals:**

Felt this was incomplete / some items that were more abstract like Cash.

**How populated:** was quite dated.

The e-Krona v eKrona – the way it was populated (in 2017 BIS paper) had the idea of the thing but was not followed up for the time being, then the scammers jumped in and filled that gap.

We identified some of the fundamental concepts.

From VCoI call - Lars wants the 11 terms for GovDTF and FDTF to work on together, following that VCoI approach, to flesh out those concepts.

Similarly we now have 'Broker' as a concept in play (see the Act draft (rejected) amendment) above.

In general: plenty of things to define – initially on the wiki, then to a concept ontology.

### Gold Coins

Are these the same kind of thing – e.g. token based, or a 3rd thing?

e.g. Krugerrand

versus ancient usage – where the minted coin is gold.

To address this: are they used as currency?

Yes - can take an American Eagle and use it as exchange for goods and services.

So that is indistinguishable from barter.

Then there are other kinds of minted coin that are marketed as collectors' items e.g. Elvis Coin (Gold).

Does the Elvis coins vary in line with USD or with the price of Gold? Or separately, via its collectibles value?

 - 2 kinds of value in play – cf Value in Use v Value in Exchange

Anticipate this is not solely dictated by the price of Au.

#### Coins / Gold Coins - Commemorative Issues

Some would be not precious metal, some would be

Collectible – value depends on its condition

Scrap value v commemorative value – one may overtake the other.

### Currency

Currency as a word implies that the thing is widely exchanged and widely accepted as a form of exchange.

Contextual – in the context of a given economy or economic exchange.

That context may vary over time.

2 potential contexts for 'currency'

1. When we say something has currency we mean that economy
2. Context of individual transaction??

The word probably only refers to the first.

In (2) you can say what is or is not acceptable for that transaction or a broader set of txns / community.

Also whether government declared it official.

 = Legal Tender

Some jurisdictions have that, some don't. Not fundamental to the definition of money but is another distinction for 'Legal Tender Money'.

If it is legal tender then the question of whether it is 'current' is moot since everyone has to accept it.

Now we have 2 contexts in play for the acceptability or usability of money items / tokens:

* Currency: the context is some Economy I which acceptance of the item is 'current'
* Legal Tender: the context is some Jurisdiction.

So e.g. a monetary item can be legal tender in one jurisdiction and be used as currency in another.

### Additional 'Acceptance' concepts

Also

Token: is or is not accepted.

e.g. old 6D coin.

So if the US were to abolish the cent, you can still have a cent as part of the price of a thing as legal tender but not use the cent coin. That distinguishes its use as a unit of measure in pricing from its existence as an accepted / current / legal tender token of monetary worth.

Similarly bank notes – are often withdrawn.

Property of Token as its acceptability.

Opposite case: Italian Gettone (pre Euro) – acceptable to receive in a handful of change.

Also (more widely): postage stamps.

Can these still be used to settle bills? Think so.

Other potential examples: casino chip.

Almost equivalent to in-game tokens.

### Token v environment

Token is or is not exchangeable outside that environment.

As long as there is a market for it a thing can always be exchanged outside that environment whether or not there is a formal exchange for it. Or e.g. you can pass your casino chips to someone else in exchange for normal currency.

* Contexts (of acceptability of tokens as money)
	+ Environment
		- Casino
		- Game
		- Second Life
	+ Economy
	+ Jurisdiction

This is all *types* of the thing (token) not a specific note with a serial number on it.

Chip / coin – indistinguishable

Bank Note: fungible

### Fungibility

Are there separate kinds of fungibility?

* One: a thing with no unique identifying features (e.g. coin)
* Two: a thing with some unique identifying feature e.g. note (serial number)

We think the word fungible is specific to 2 i.e. it defines how one identifiable thing can be treated as equivalent to another. Example: regardless of what exchange you bought a security on you can sell it on another.

Fungibility: is what you can do with a thing; it is not inherent to the thing itself.

* Notes: are fungible and interchangeable
* Coins: are interchangeable

Fungible is a kind of interchangeable.

Time dependency – is a feature of the context.

e.g. a note is withdrawn. Once bank no longer accepts it in payment it becomes unusable elsewhere.

Edge cases: if you had a bank note signed by George Washington it would not be fungible.

Or would it?

Are goats fungible? Yes if similarly specified. A ram (goat) would not be fungible with a nanny-goat.

Terminology:

* Sheep: Ewe, Ram
* Goat: Nanny-goat, Ram? Billy?

### Gold coins:

3 sources of value:

* Face value (what it can fungible exchange for)
* Collectible value (e.g. commemorative)
* Scrap value – metal by weight

Elvis coin: has 2 and 3.

Scrap value is not additive, it is usually hidden behind commemorative value

American Eagle / Kruggerand: Has 1 and 3. But not 2.

## Next Meeting

Start diagramming these concepts.

Determine: what to deliver and to whom and in what order, and for what purpose.

e.g. Whether to do an RFI versus a wiki page. To be decided by the wider group. MB, BT also agree Wiki i(rather than RFI) is a nice idea. Would be recognized as a deliverable at OMG but having no formal status.

What we do need to deliver = the white paper and / or discussion paper. One some accounts of things, White Paper is not a thing.

So we can continue to work on concepts on the basis that some at least would make it to a discussion paper and potentially something more.

There was a kind of thing mentioned on yesterday's VCoI that corresponds to the idea of a white paper, and is agreed by the OMG Board. Not sure if it's formally called a White Paper.

Needing a set of definitions (like we did in Amsterdam). We could simply do what we did in Amsterdam and just send a letter attaching an OMG published document that comes out of a TF meeting, if we like.