Blockchain PSIG Call Notes

*15 April 2021*

# Attendees

* Kam, Ambrose (US)
* Nick Stavros
* Mike Bennett
* Frederic
* Robert Nehmer
* Bobbin Teegarden
* Ian Stavros (643024 - Jackrabbit Consulting)

**Apologies:** Robert Rencher

# Agenda

* Smart Contracts RFI
* Other RFIs scoping / planning

# Meeting Notes

## Smart Contracts RFI

Main parts:

* Part 2: Introduction (do last)
* 2.2 Detail
  + Smart Contract (descriptive background)
  + Architectural background
  + Questions
* 3.1 who may respond
* Annex – glossary, abbreviations, references

### Quarterly Meeting session outcomes

Open questions / unknowns

* Communities / participation
  + In Smart contracts themselves
  + In Blockchains (e.g. IOTA blockchains on top of the Tangle DAG)
* Crypto currency ownership / movement questions

### Cryptocurrency – on exchange versus in wallet

There were things we had not figured out regarding where the currency ownership is defined, between exchanges and personal wallets.

Things like:

* Swaps – where you exchange crypto / crypto or crypto / fiat
* Liquidity pools
* Farms

#### IOTA Recent Webinar

There was a recent webinar that shed some light on this. Dave de Fijter from IOTA.

* Is the webinar available?
  + Believe so
  + MB to distribute the information

#### Exchanges Webinar - Idea

Can we do a pub night where we simply watch a webinar as a group and discuss during or after.

* Great idea

Make that the agenda for a future call for this meeting.

THEN we can refine the question on that side.

#### Other Suggestions on Exchanges

Shouldn't we include something about the huge splash Coinbase IPO made, and the commentary around it?

<https://www.nytimes.com/2021/04/14/business/coinbase-ipo-stock.html>

For this Smart Contracts RFI – what do we need to find out on exchanges and currency?

* E.g. how you access funds for gas fees
* How you provide payment in Smart Contracts

On (1) you pay a fee to make a transaction happen

On (2) a Smart Contract can represent any of:

* Anything that you can with distributed code
* Any economic interaction (as per Contracts in general) = exchange of commitment
  + Involve commitments to pay in fiat currency (USD)
  + Involve commitments to pay in cryptocurrency (e.g. MIOTA, BTC)
  + Involve commitments to transfer internal credits of some kind, that can be locally spent within a given ecosystem
  + Commitments to provide data (benefits in kind)
  + Commitments to offer services
    - Provide a regular e.g. Taxi service
    - Provide Archival Nodes services (i.e. offer services in a DLT environment)
    - Can commit to e.g. make processing power available

Basically anything you can define as commitments

So the question for the Smart Contracts RFI here relates to availability and movement of funds, including crypto funds, fiat, internal credits and so on.

* Basically any commitment
* Tokens / fungible units for commitments

The question of paying for a SC operation is coming clos to the Net Neutrality argument – can use purchasing power to get ahead of others.

* Is a concern?

### Potential RFPs

Consider potential RFPs:

* Middleware / protocol type of stuff
* Business issues and challenges
  + Smart Contract as Contract
  + Commercial / Neutraliy issues
    - E.g. ‘Net’ Neutrality
    - Transaction Neutrality

So the Net Neutrality / economic considerations above could potentially come under a possible business-focused RFP

* OR there may not be a need for RFPs in thse areas – the RFI is to figure out.

#### Theme: Neutrality

* Transaction neutrality
* Smart Contract Neutrality

These is a theme for our questions: Business / Commercial questions

Of which there are Neutrality questions

Frame the RFI to ask what neutrality concerns the responder(s) may be aware of or experiencing

Give examples – gas fees

Also consider: any analog of how finance industry has used network speed as an arbiter of potential advantages.

### Bad Actors

A large part of any protocol at the DLT Ledger end of things (e.g. IOTA Tangle, the Ethereum blockchain etc.) is about anticipating and preventing attacks across various vectors. We should ask questions about that.

* Sybil protection
* Dust (lots of tiny transaction) cf DDOS
* Others?

On these kinds of attack / bad actors, there are 2 kinds of question:

* How attacks at the Protocol end impacts SCs (i.e. attacks on the Ledger)
* Are there similar or equivalent attack vectors specific to Smart Contracts

That’s Bad Actors

What about commercial sharp practices – not bad actors as such. People arbitrage something about their position, capabilities (e.g. mining).

See the example of stock exchange algorithmic trading

Equivalents: selecting Blockchain by cost v throughput speeds

Idea: there may be (will be) different motivations for different participants in the SAME Smart Contract in terms of fees v throughput and the resulting choice in DAG.

#### Questions about Bad Actors

Webinar mentioned above will help us be able to ask some of those (commercial) questions.

Add a subsection in the RFI for Commercial Considerations’ – as part of the ‘background’ stuff, then follow with question on that topic.

## Q2 Planning

### Themes:

* Governance
* Interoperability
* The Money Stuff
* SCADA related

Clusters of the overall landscape:

* Interoperability related things
  + Oracles
  + Smart Contracts interoperability
  + Archival node requirements ('Permanodes')
  + Taxonomy of Nodes – see IEEE and DIDO
    - Layer models
* DLT and SCADA
  + Could include
    - Energy,
    - smart cities,
    - manufacturing (petrochem) etc.
* Commercial considerations
  + Supply chain
  + Retail
  + Currency movement questions
    - Money stuff
      * Exchanges
      * Digital Wallets
  + Arbitrage
  + Communications e.g. 5G / 6G
    - Commercial 5G activities focusing on use of DLT to enhance data security and privacy
* Privacy and Identity Considerations
  + Disposable SSI RFI
  + Other stuff to explore

### Also Suggest:

Layer Model – see IEEE, IIC, elsewhere.

* Do we need that?
* Is that an RFI? (probably not)

For some of these things – Wiki pages to complete.

Relates to Interoperability.

## Next Week

Focus on the overall landscape.

Or do the ‘movie night’ on the webinar?

Consensus: Do overall landscape next week

Have a chance to look at the webinar I mentioned between now and then.

Dig out some of the recent IEEE stuff as well.