

Charter DG-BSC

DG NAME

The DG name, acronym and abbreviation must not include trademarks not owned by the Organization, or content that is infringing, harmful, or inappropriate.

Blockchain and Smart Contracts (BSC) DG

DISCUSSION TOPIC/PURPOSE/MOTIVATION

Please provide a clear statement of the topic, purpose and/or motivation for the formation of this DG.

The purpose of the Kantara DG is to initiate a broad discussion on various aspects of smart-contracts and blockchain systems.

The advent of the Bitcoin currency system has generated interest in permissioned blockchain systems not only for the purposes of achieving an immutable "trustless" distributed ledger, but also for the execution of smart-contracts (code) on the blockchain P2P nodes that conforms to a given consensus algorithm.

Among other things smart contracts offers something previously attainable in paper contracts, namely the programmability of parts of the contracts whose execution is based on real-time input from external sources of data (e.g. stock ticker feed; weather reports; IoT sensor feeds, etc). When multiple nodes on the P2P execute the same smart-contract or execute parts of an interconnected contract, a certain degree of immutability of the outcome can be achieved based on the choice of the P2P consensus algorithm. This in turn provides a corresponding degree of assurance among transacting parties that the execution of the smart-contract has reached completion.

There are, however, a number of challenges in both the technical and legal spheres before smart contracts can be adopted, deployed and obtain legal standing.

Among others, the topics to be covered are as follows:

- Smart contracts specification language (e.g. CommonAccord)
- Legal aspects of Smart contracts specification language
- Digital identities of entities specified in smart contracts
- Distributed access control to private and shared repositories of smart contracts.
- Legal status of consensus algorithms
- Authenticated data sources/feeds
- Agreements for data collection, use and disclosure (AKA Consent Receipts)

LEADERSHIP

Proposed DG Chair subject to confirmation by a vote of the DG Participants.

- Thomas Hardjono (co-chair) – technical
- Jim Hazard (co-chair) – legal

AUDIENCE

Anticipated audience or users of the work.

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PROPOSERS

Names, email addresses, and any constituent affiliations of at least the minimum set of proposers required to support forming the WG. At least 3 proposers must be listed. At least 2 of the proposers must be Kantara Initiative Members - current members list

- Thomas Hardjono
- Eve Maler
- Jim Hazard