List of Selected Proposals for Blockchain Challenge – Growing and Connecting Blockchain Business Networks

Payments theme:

– **LegalFAB Pte Ltd**: Offshore Decentralised Autonomous Corporation (DAC)

TradeTrust theme:

– **Ernst & Young Advisory Pte Ltd:** TradeTrust and Nightfall

– **HKDAG (Singapore) Pte Ltd (HashKey Group):** Cross-Borders Trade and Supply Chain Finance Platform

– **JEDTrade Pte Ltd:** Managing Business Process across Enterprises with TradeTrust

– **Trade Window Pte Ltd:** Trade Window Business Network

– **Tramés Pte Ltd:** International Freight Orchestration

– **veriTAG Pte Ltd:** Digitize and Legalize ACRA documents in China

Open theme:

– **Chemistry Team Pte Ltd** in collaboration with **So Now Asia Pte Ltd** and **Kryha APAC Pte Ltd**: Circular Economy on the Blockchain: Connecting Off-take Recovery with Manufacturing to Enable a Zero-waste Economy

– **InfoCorp Technologies Pte Ltd:** Cross-Border Livestock-Backed Financing via FarmTrek and Sentinel Chain

– **JEDTrade Pte Ltd:** JEDTRADE Interoperability with SmartMesh Ecosystem

Payments theme:

Offshore Decentralised Autonomous Corporation (DAC)

LegalFAB is a legal technology company, which offers enterprise solutions for all businesses. LegalFAB's Decentralised Autonomous Organisation (DAO) is a blockchain platform that facilitates the creation of verified corporate identities to perform trusted transactions and workflows. It aims to connect to Project Ubin's payments network to facilitate the creation of verified business profiles to (i) access escrow and conditional payments functionalities, (ii) allow clients to provide verified information to a regulated entity to perform Anti-Money Laundering (AML) and Know Your Customer (KYC) checks, and (iii) incorporate a secure voting system for legal entities using the DAO.

TradeTrust theme:

TradeTrust and Nightfall

Ernst & Young is a global leader in assurance, tax, transaction and advisory services. Through its advisory practice, EY assists organisations and government entities in identifying and capitalising on business opportunities. As part of the Private electronic Bill of Lading (eBL) featuring Nightfall & TradeTrust project, EY is accelerating the evolution of modern trade through secure transfer of digital documentation and alleviating the manual burden associated with the current process. This proposal addresses the key challenge of transferring ownership of trade documents by allowing assigned access to the payload but limited to singular ownership of the document title. This project combines the foundation created in the TradeTrust protocol with Nightfall (the protocol for anonymous transacting) demonstrates the way document ownership can be transferred privately between multiple network participants on the public Ethereum network.

Cross-Borders Trade and Supply Chain Finance Platform

HashKey, through its Mainland China strategic partner Wanxiang Blockchain Inc, operates one of Mainland China's largest blockchain-based supply chain finance platforms within the automotive logistics supply chain, referred to as "YunLianMeng". DBS Bank, and some of China's largest automotive manufacturers and logistics companies like Beijing Motor are already onboarded and using the platform. In a different deployment of the platform, Jiangxi Zhengbang and Jiangxi Bank are using HashKeys' blockchain platform to secure OEM->Tier1 sales invoices in their agricultural supply chain, using those blockchain secured and verified invoices to provide short-term financing. The key business value of HashKey's platform is allowing companies to better utilize the value of assets on their balance sheet, unlocking liquidity. These assets may be inventory, accounts receivables, or others, and secure digitization of these assets on the blockchain gives lenders greater confidence in the authenticity of these assets, lowering cost of capital for companies.

Managing Business Process across Enterprises with TradeTrust

JEDTrade is a technology company that builds business solutions powered by leading edge technology such as blockchain and data analytics. The use case for Managing Business Process across Enterprises with TradeTrust is to establish documentation provenance from the point of quotation, invoicing, delivery and payment of goods. This will help to minimise documentation fraud and reduce the risk for trade financing. JEDTrade proposes a digital business signing (or attestation) that will be recorded in the distributed ledger network which will be part of the current TradeTrust wrapper. This will return a document status based on the stage (of business process) whenever the document hash is queried on the Ethereum blockchain. The proposed intention is to allow every stakeholders in the network to have the appropriate visibility on the status of the trade. Financial institutions will also be able to finance transactions based on trusted documentation and goods flow.

Trade Window Business Network

TradeWindow is an enterprise software company that develops solutions for exporters, freight forwarders, and other global supply chain participants. It currently serves more than 600 large exporter customers in New Zealand and Australia, and extending into a further 15,000 freight forwarder serviced clients, offering trade documentation and compliance services. TradeWindow also provide the ability to issue both Free Trade Agreement (FTA) and non-FTA Certificate of Origin (CoO) to exporters in New Zealand. Trade Window Business Network (TWBN) is envisioned to provide a new innovative, secure and efficient means to share trade data or documents with cross border trading partners and to enable the transfer of title of the electronic Bill of Lading (eBL). Interoperability will also be developed in TWBN to connect with other networks like Bolero, essDocs, Global Shipping Business Network (GSBN), Mastercard, TradeVan and Wave among other partner networks.

International Freight Orchestration

Tramés is an end to end supply chain orchestration technology company, headquartered out of Singapore, with the key objective to create a streamlined and unified workflow for MNCs and their logistics partners. There are 4 key components in the International Freight Orchestration (IFO) namely Concise Milestones, Document sharing, Proactive shipping management and Collaboration Tools. With the adoption of TradeTrust standards, anticipated benefits for participants on the Trames platform include Digital Equivalence – ensuring all electronic documents transmitted through the Trames platform will be compliant, reducing transaction time whilst maintaining uniqueness and authenticity; Authenticity – providing assurance that transmission of all information across the Trames network is secure and documents unique, reducing the risk of fraud; and Provenance and Auditability – providing full transparency of actions across all stakeholders with all transactions and documents exchanged on the Trames network immutably recorded on the blockchain.

Digitize and Legalize ACRA documents in China

veriTAG is one of the first company in Singapore to incorporate its patented dual QR tracking and authentication system onto Blockchain. In project Digitize and Legalize ACRA documents in China, the entire digital document flow will be tracked under blockchain through TradeTrust. Multiple blockchains have to be integrated together as TradeTrust is on Ethereum platform while veriTAG is on NULS platform, and China Certificate Authority (CA) is on their proprietary Blockchain. The final objective is to have all original document legalized as digital documents, which include sales certificate, health certificate, certificate of origin, Bill of Lading (BL) etc. Documents created from the authorities will be protected, digitally signed and acknowledge by the key parties including CA. TOPPAN will take up TradeTrust with veriTAG to Japan as the next stage of development.

Open theme:

Circular Economy on the Blockchain: Connecting Off-take Recovery with Manufacturing to Enable a Zero-waste Economy

Chemistry Team is a strategic consultancy company using a human-centered and design approach. **So Now Asia** is a circular economy focused consultancy company. **Kryha APAC** is a blockchain technology and consultancy company. These 3 companies have collaborated to promote the circular economy on the blockchain. The proposal will put in place an open and decentralized platform, which incentivises parties to collaborate in circular value chains and aims to enable the easy adoption of circular business models, leveraging on distributed ledger technologies, smart contracting, immutability via the blockchain, and provenance tracking between stakeholders within a manufacturing scenario. This platform facilitates the circular trade of ECOR panels as well as other materials produced from waste materials. It streamlines collaborations among the stakeholders by removing frictions related to trust, providing the stakeholders with a single source of truth in the form of a distributed ledger that logs all activities in the value chain including the signature of the actor and a timestamp of when the activity occurred.

Cross-Border Livestock-Backed Financing via FarmTrek and Sentinel Chain

InfoCorp Technologies is an integrated FinTech and AgriTech company that aims to bring inclusive financial services to the livestock industry in emerging markets via its blockchain-based platform, FarmTrek. In developing countries, the potential of livestock-backed financing model can be maximised if given the ability to raise financing from off-shore developed countries to enable different competing parties to offer financing opportunities without centralised monopoly. To achieve this objective, cross-chain interoperability will be developed between FarmTrek (a private blockchain solution with a primary focuses on in-country livestock provenance) and Sentinel Chain (a consortium blockchain platform with a primary focus on cross-border livestock-backed financing) to facilitate the integration of the livestock and financial ecosystems.

JEDTRADE Interoperability with SmartMesh Ecosystem

JEDTrade is a technology company that builds business solutions powered by leading edge technology such as blockchain and data analytics. JEDTrade's JED Enterprise Solutions (JED ES) is an open platform providing business smart contracts as a service for processes such as issuance of documents and attestation/signing on the Ethereum blockchain. The proposed interoperability capability between the blockchain business networks (i.e. JED ES and SmartMesh) allows business processes that are deployed via JEDTrade's solutions from the Ethereum mainnet to be made interoperable with the remote SmartMesh network. This aims to create trust in digital documents across entities and to improve efficiency by reducing the need for manual processes and drive digitisation and process automation.