Submission of Comments on the Consultation Paper on Proposed Regulatory Requirements for Virtual Asset Trading Platform Operators

Dear Sir or Madame,

We appreciate the opportunity to submit comments on the Consultation Paper on the Proposed Regulatory Requirements for Virtual Asset Trading Platform Operators Licensed by the Securities and Futures Commission (SFC). **Coded Solution Limited (V Systems),** a blockchain infrastructure provider specializing in database and cloud services, has successfully delivered numerous major blockchain projects. Our focus is on delivering scalable, durable, high-performance, and 51% attack-resistant distributed ledger technology (DLT) infrastructure.

In this comment letter, we present our comments on the following topics:

- **Custody Requirements for Virtual Asset Trading Platform Operators**
- **Risks regarding retail investors' access to virtual assets**

Regarding Cold Wallet Storage Requirements for VA Trading Operators

The proposed custody requirements suggest that operators should store 98% of client virtual assets (VA) in cold storage, with effective controls in place to ensure proper authorization and validation of access to cryptographic devices and applications. While we acknowledge the importance of securing client assets, we believe that the 98% cold storage requirement might be overly rigid.

We propose that the custody requirements should allow for flexibility and innovation in implementing security measures meeting the desired standards. Emerging technologies, such as multi-sig wallets, threshold signatures, and advanced cryptographic techniques, can provide robust security while enabling a higher proportion of assets to remain available for trading.

We recommend that the SFC consider these alternative solutions and allow for innovation in implementing security measures, provided that the controls demonstrate the required effectiveness.

Multi-Sig Wallets and Threshold Signatures

Multi-sig wallets and threshold signatures can offer a flexible, dynamic approach to virtual asset custody, addressing the 98% cold wallet requirement while maintaining desired security standards. By requiring multiple signatures or shares to authorize transactions, these technologies reduce the need for large amounts of virtual assets in cold storage, ensuring secure and accessible hot wallets.

Multi-level authorization processes can be implemented with multi-sig wallets and threshold signatures, allowing for varying access and control levels based on transaction type or asset amount, reducing insider attack risks and improving platform security.

These technologies can enhance the overall resilience and recoverability of the virtual asset custody system, easing the recovery of lost assets or prevention of further damage in case of a security breach or private key access loss.

Coded Solution (V Systems)' Multi-Signature and Threshold Multi-Signature Scheme for XEdDSA

Coded Solution (V Systems) has designed a new multi-signature and threshold multi-signature scheme for XEdDSA to improve cryptographic operations' security. This implementation can be used in various XEdDSA-based protocols, blockchains, and communication applications.

Our new multi-signature scheme offers the following advantages:

- Easy integration with hardware devices for functions such as security scanners, hardware wallets, and data-storage centers.
- Deployment of offline transactions based on XEdDSA, reducing risks associated with offline applications.
- Enhanced security, making it difficult to trace addresses and transactions, improving user confidence in app data and downloads.
- Comparable signature speed and complexity to current multi-signature schemes, ensuring good performance.

We propose that virtual asset trading platform operators be allowed to use innovative and advanced technologies, such as our multi-signature and threshold multi-signature scheme for XEdDSA, to meet the desired security standards for virtual asset custody. Instead of mandating a specific cold storage percentage, operators should be required to implement effective controls for securing virtual asset custody.

Allowing flexible and dynamic approaches to virtual asset custody will improve the overall security and resilience of the virtual asset trading ecosystem, reducing the risk of insider attacks and other security breaches. We believe our proposed solution offers a more effective and efficient approach to virtual asset custody while meeting the security standards expected of virtual asset trading platform operators.

Fintech Solutions to Address Risks of retail investors’ access to virtual assets

We noticed SFC’s concerns about allowing retail investors to access licensed virtual asset (VA) trading platforms. The SFC acknowledges that virtual assets are prone to issues such as high volatility and market manipulation, which may pose risks to retail investors who may not have the necessary knowledge or experience to understand these risks. Additionally, some virtual assets do not have any intrinsic value, which may make them more susceptible to speculative trading and price manipulation.

We believe there are several financial technology, trading, risk management, and blockchain solutions that can help address the concerns :

1. **Risk Management Tools:** Virtual asset trading platforms can implement robust risk management tools that use artificial intelligence and machine learning algorithms to identify and prevent market manipulation and fraudulent activities. These tools can also monitor market volatility and alert investors of potential risks and opportunities.
2. **Regulatory Compliance and Monitoring:** Blockchain technology can be used to ensure regulatory compliance and enhance transparency. Virtual asset trading platforms can leverage blockchain to store immutable records of transactions and comply with regulatory requirements such as KYC/AML. Additionally, blockchain-based monitoring tools can be developed to detect and prevent fraudulent activities.
3. **Stablecoins:** To address the issue of high volatility associated with virtual assets, stablecoins (pegged with fiat or commodities such as gold) can be used as an alternative. They offer price stability and can be used to trade virtual assets without the risks associated with price volatility.
4. **Black and white listing controls for the custodian or escrow function:** One solution could be to implement black and white listing controls for the custodian or escrow function of licensed VA trading platforms. These controls could help prevent market manipulation by limiting the types of virtual assets that can be traded on the platform. For example, only virtual assets that meet certain criteria, such as having a minimum market capitalization or trading volume, could be allowed for trading.
5. **Limited Access to Decentralized Platform:** Another solution could be to allow retail investors to have limited access to certain decentralized platforms, which are more secure and efficient for trading than **unregulated** VA trading platforms. Decentralized platforms use blockchain technology to provide a trustless and transparent platform for trading virtual assets, which can help prevent market manipulation and protect retail investors from fraud.

Sincerely,

Coded Solution Limited (V Systems))