A Subsidiary of HKE (1726.HK)

Securities and Futures Commission

By Email

23 March 2023

Dear

Re: HK BGE Limited written responses on "Consultation Paper on the Proposed Regulatory requirements for Virtual Asset Trading Platform Operators Licensed by the Securities and Futures" dated 20 February 2023 ("SFC Consultation Paper")

In relation to the captioned SFC Consultation Paper, we/HK BGE Limited ("BGE") has the following comments and/or recommendations for your consideration.

1. ***Our response to "Question 1 - Do you agree that licensed platform operators should be allowed to provide their services to retail investors, subject to the robust investor protection measures proposed? Please explain your views"***

We agree that licensed platform operators should be allowed to provide services to retail investors. At the same time, we concur that retail clients have a lower risk tolerance than professional investors.

In order to gain a better understanding of clients' financial health and background, it is important to consider designing distinct client onboarding forms and suitability tests for retail clients. Furthermore, we suggest scrutinizing additional supporting documents, such as salary slips and bank statements, to verify the accuracy of the clients' provided information.

Rather than setting a hard trading limit for retail clients, we recommend the trading limit to be set based on the multiples of clients' monthly salary (e.g. no more than three months of their monthly income) so as to safeguard the financial interests of retail clients and limiting their risk exposure to the volatile market at the same time.

Based on our observation in the virtual asset market, here are some information that we would like to share with the Securities and Futures Commission ("SFC").

1) Market safety

The mainstream blockchain network, for example Bitcoin and Ethereum, has demonstrated its safety and resilience after years of development.

- For Bitcoin, it is extremely costly and expensive to conduct a 51% attack. Bitcoin has never experienced a successful 51% attack in many years. As the market capitalisation is still growing for Bitcoin, it has become mathematically impossible to conduct a 51% attack on it.

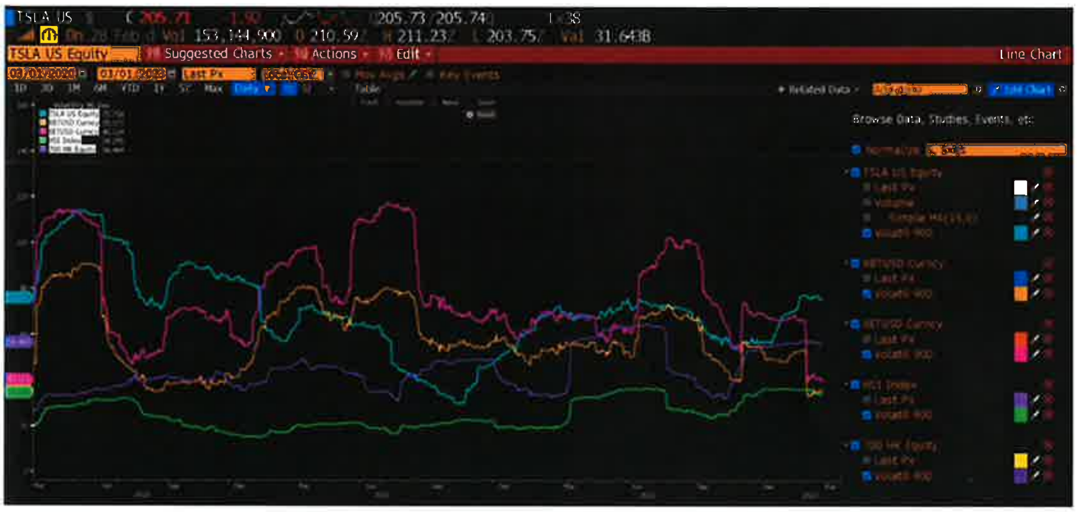
- For Ethereum, the network upgraded from proof of work ("POW") to proof of stake ("POS") in 2022. For POS validators, their staked crypto funds and the risk of slashing incentivize them to act in the network's best interests. In the case that a validator makes incorrect or missing attestations, a portion of their staked funds will be "slashed" as penalty. The amount of Ethereum being slashed differs across networks. The Ethereum network has therefore become more secure, less energy-intensive, and better for implementing new scaling solutions.

2) Market Volatility

The primary risk associated with the trading of virtual assets is the short to medium-term price fluctuations. The chart below displays the 90-day price volatility of Hang Seng Index (HSI Index), Tencent (700 HK Equity), Bitcoin (XBTUSD), Ethereum (XETUSD), and Tesla (TSLA) from 1st March 2020 to 1st March 2023. While Bitcoin and Ethereum exhibit higher volatility than the HSI Index, they demonstrate lower volatility than large-cap tech stocks such as Tencent and Tesla. This debunks (part of) the myth of equities investment being less risky than virtual assets.

Having considered the virtual asset trading platform operators ("VATPO") are prohibited from conducting margin trading and short selling of virtual assets, we believe that the trading risks for retail clients are manageable and will not pose significant threats to the financial system.

90-day price volatility (1-Mar-2020 to 1-Mar-2023)[1]



Hang Seng Index	34.295
Bitcoin	35.373
Ethereum	40.124
Tencent	56.464
Tesla	75.758

3) Extra Measures for Retail Clients

We believe a healthy financial market should strike a good balance between investor protection and long term capital growth. In addressing the concerns above, we have the following recommendations for retail investors regulation.

[1] Price volatility is calculated as the standard deviation multiplied by the square root of the number of periods of time, T. 90 days in this case.

1) There should be distinct client onboarding forms and suitability tests for retail clients (as mentioned earlier);

2) Allowing VATPO to set a deposit limit for all retail clients and such limit should be the multiples of their monthly income. If a client's risk assessment score is too low, the VATPO should reject his/her application;

3) During the process of client onboarding, clients have to make a self-declaration of virtual asset holding on any digital assets that they hold in other virtual asset trading platforms (regardless of whether they are regulated or not). This helps VATPO to conduct a more holistic evaluation of the client's virtual assets or risk exposure;

4) Clients need to provide further financial or income proof if they want to increase the deposit limit;

5) Once the abovementioned deposit limit is reached, the client cannot make further deposits, regardless of whether it is fiat currency or virtual assets;

6) Deposit limit should be reviewed and/or reset (if required) annually or whenever appropriate.

We agree that SFC-licensed VATPO should be opened up for retail investors. This allows retail investors to access virtual assets through SFC regulated platforms instead of turning to the unregulated platforms overseas. The position limits and/or trading limits for retail investors should be more stringent than professional investors. With customized client onboarding forms and suitability assessments designated for retail clients, the licensed VATPO can better understand retail clients' financial situation and background. At the same time, we as a responsible VATPO applicant, will ensure retail clients have relevant and sufficient investor education, including information on investment products and services, risks, and protection measures, in order for them to make informed investment decisions.

2. *Our response to "Question 2 – Do you have any comments on the proposals regarding the general token admission criteria and specific token admission criteria?"*

In relation to the general token admission criteria, we would like to propose a mechanism which is highly similar to the mutual stock market access between the Mainland and Hong Kong equities market for virtual asset listing.

Under the current framework, VATPO need to set up their own Virtual Asset Listing Committee for reviewing each token listing and each token application needs to receive the final approval from the SFC before its listing. Thanks to the consideration of Section 61 (e) of the SFC Consultation Paper, where virtual assets are made available to professional investors ("PIs") only, the VATPO will only be required to notify the SFC in advance of any plan to add or remove virtual assets to or from its trading platform without the need to seek approval from the SFC.

Along the same vein, where virtual assets (i) have been listed on other SFC-licensed trading platforms and (ii) are made available to the PIs only, we suggest these virtual assets to be deemed approved by the SFC for new VATPO applicants. It is redundant to seek approval from the SFC multiple times for listing of the same token. Where SFC has already reviewed and approved the listing of the tokens (e.g. Bitcoin and Ethereum) on a licensed VATPO, it is unnecessary to require another VATPO and/or new VATPO applicants to seek approval for the same token listing given that the SFC has already reviewed the relevant tokens' listing documents, processes and procedures before.

Rather than duplicating each VATPO's effort of submitting substantially similar, if not the same, smart contract audit and legal opinion for the tokens which another VATPO (which is the first applicant of the token) has already provided to the SFC, the new VATPO and/or VATPO applicants, in particular their Virtual Asset Listing Committee, should focus more on the technical capability of providing trading service to the clients and provide the related information to the SFC.

3. ***Our response to "Question 3 – What other requirements do you think should be implemented from an investor protection perspective if the SFC is minded to allow retail access to licensed VA trading platforms?"***

Given SFC is minded allowing retail access to the SFC-licensed VATPO, retail investor accounts opened in those platforms should also be legitimately covered by the SFC Investor Compensation Funds with the maximum limit of HK$500,000 per person. If there is any joint account arrangement, each account holder should be subject to a maximum compensation of HK$500,000. Furthermore, relevant transaction levy may also be considered and applied to the SFC-licensed VATPO.

4. ***Our response to "Question 4 – Do you have any comments on the proposals to allow a combination of third-party insurance and funds set aside by the licensed platform operator or a corporation within its same group of companies? Do you propose other options?"***

We welcome the allowance of combination of third-party insurance and funds set aside by the licensed platform operator or a corporation within its same group of companies ("Set Aside Fund") (together with third-party insurance, "Combined Insurance"). It is because obtaining the virtual asset insurance for hot wallet is very difficult, if not impossible, in Asia or any parts of the world after 2020 (unless the firms have bought such insurance before 2020, i.e. existing clients, or USA incorporated firms). Virtual asset insurance for the "warm wallet" is similar to insurance for hot wallet but SFC may not see it as an acceptable substitute.

Having the Combined Insurance can resolve the predicament – For the protection of cold wallet, VATPO applicants can buy insurance from third party insurance company. While for the protection of hot wallet, VATPO applicants can reserve the Set Aside Fund for investor protection purposes (see **Table 1** below).

However, the composition percentage of such Combined Insurance is not specified in the SFC Consultation Paper. We suggest the SFC to allow the Set Aside Fund to constitute up to 50% of the

Combined Insurance for cold wallet protection. Where there is an unforeseeable high volume upsurge of crypto assets influx and the existing insurance policy cannot provide enough coverage, the Set Aside Fund will allow more flexibility for VATPO to quickly inject capital into the Set Aside Fund in order to resolve the technical breach of insurance coverage requirement (see **Table 2** below).

Table 1

	Third-Party Insurance	Set Aside Fund
Hot Wallet (Coverage of 100%)	Nil	100%
Cold Wallet (Coverage of at least 95%)	100%	Nil

Table 2

	Third-Party Insurance	Set Aside Fund
Cold Wallet (Coverage of at least 95%)	50-100%	0-50%

Furthermore, in relation to the Set Aside Fund, rather than keeping the funds in idle, we suggest the SFC to consider the possibility for the Set Aside Fund to be invested in capital saving investments with the service providers and portfolios subject to the SFC approval. We believe that the proposed arrangement will strike a better balance between investor protection and commercial viability.

5. ***Our response to "Question 6 – Do you have any suggestions for technical solutions which could effectively mitigate risks associated with the custody of client virtual assets, particularly in hot storage?"***

Hot wallets are online storage solutions used to store virtual assets that are frequently traded or used for transactions. One of the major risks associated with hot wallets is that they are connected to the internet and are therefore much more susceptible to hacking and other cyber-attacks than cold storage solutions.

Some of the major risks are hacking, phishing attacks, malware attacks and technical glitches. Although some mitigation measures can be implemented to reduce the above risks, the risks of losing client money in hot wallet remain high. Therefore, the most effective way to mitigate the risk is to reduce the number of transactions in-and-out the hot and cold wallets.

Here are the common reasons for routine client funds deposits and withdrawals:

1. New fund deposits for trading purposes;
2. Profit taking or stop loss of client trading accounts; and
3. Position rebalancing for market makers/quant funds.

When the market volatility increases and more arbitrage strategies are executed by quant traders, the need for cross platform deposits and withdrawals to rebalance the portfolio will increase simultaneously. At the same time the trading platform will need to transfer assets from cold to hot wallet to satisfy client needs.

To resolve the above problems, we suggest creating ***a private, blockchain-based inter-exchange clearing and settlement network***. The advantages of setting up the settlement network are as follows:

1. Reduce the number of transactions between the platform operators and hence reduce the amount of client assets stored in hot wallet;
2. Reduce the time for public blockchain network settlement. Due to different reasons, public networks often face traffic congestion, but the settlement speed for the private network will not be affected;
3. Reduce the costs of exchange operations – The gas fee of fund movement between wallets usually contributed to a large amount of IT operations costs.
4. Enhance transparency – To provide audit trail of client funds movement and enhance the ability to counter money laundering and illegal transactions;
5. With further upgrade to the ecosystem, the network will be expanded and have more participants from other sectors, e.g. asset management companies, securities brokers, etc.

The features below are also suggested in order to create the settlement network:

1. Only regulated and approved participants by the SFC can have access to the settlement network;
2. Credit limits shall be set between participants. Transactions that would exceed the limit will be settled immediately to avoid further credit risks;
3. The settlement network should be subject to an annual independent audit.

6. <u>Our response to *"Question 7 – If licensed platform operators could provide trading services in VA derivatives, what type of business model would you propose to adopt? What type of VA derivatives would you propose to offer for trading? What types of investors would be targeted?*</u>

We appreciate the SFC's initiative of having a natural progression of the virtual assets ("VA") derivatives market as this offers investors greater market access, investment tools to hedge their risk and/or leveraging exposure to certain virtual assets.

Subject to regulatory constraints, we recommend priorities to be given to the most popular derivative products, e.g. *VA options* and *VA futures*. As the SFC requires VATPO to set trading limits and/or position limits with reference to the financial situation and suitability assessment of all clients, the position and trading limits for retail investors should be proportionally lower than those for PIs. We also recommend that both retail clients and PIs to be allowed to trade derivatives that are subject to additional terms and conditions to be published by the SFC.

We believe that a more prudent approach is for the VA futures to be offered to PIs, institutional clients and more sophisticated investors to do either hedging or short positions. As for retail clients, they will need to demonstrate that they have relevant derivative trading experience or pass certain tests on VA derivatives before they are allowed to trade any VA derivatives offered by the SFC-licensed VATPO.

7. **Our response to *"Question 8 – Do you have any comments on how to enhance the other requirements in the VATP Terms and Conditions when they are incorporated into the VATP Guidelines?"***

(A) Ratio of Virtual Assets in Cold and Hot Wallets

With reference to Section 7.5(c) of the Terms and Conditions for Virtual Asset Trading Platform Operators ("T&C"), 98% of client virtual assets should be stored in cold storage in the Platform Operator and its associated entities which means only 2% of client virtual assets can be deposited in hot storage. The rationale behind setting the "98-2 ratio" is to minimize the exposure loss arising from compromises or hacking.

However, it is very difficult to keep such 98-2 ratio ***at all times*** due to the unpredictable of virtual assets amount in-and-out of the trading platform and fluctuation of the virtual asset values in reality. It is highly likely for VATPO to breach this licensing condition for a very short period of time (e.g. exceeding the 2% hot storage threshold for 5 minutes). A more pragmatic approach is to allow a buffer range of such ratio (see **Table 3** below).

Table 3

		Percentage of virtual assets (Original)	Percentage of virtual assets (Proposed)
A	Hot Wallet	2%	2-5%
B	Cold Wallet	98%	95-98%

Having a buffer range is neither complicating the whole calculation nor relaxing the importance of hot wallet safety but allow flexibility for VATPO to cater operational needs. At the same time, the proposed buffer range avoids over-reporting to the SFC about the technical breach cases.

(B) Insurance Percentage

Apart from our suggestion in Part 4 above, we would like to recommend a "Tier-Down" model for the insurance requirement (see **Table 4** below). For example, if a VATPO is licensed with the SFC for a year and confirmed to have ***no*** security breach incidents and successful hacking events, it can be eligible for the modification of insurance requirements within the T&C from 100% to 97.5% (for hot wallet) and from 95% to 90% (for cold wallet). VATPO will only need to comply to a lower percentage requirement for the second year and such percentage will cascade down in subsequent years, but halt in certain percentage for both wallets, e.g. until a minimum of 70% and 80% insurance coverage for cold and hot wallets respectively. We believe this not only can create a healthy balance of client asset protection and commercial viability, but also provide an *incentive* for VATPO to strengthen its cybersecurity.

The figures below are for illustrative purposes and the SFC has the ultimate authority to determine the desirable numbers or percentages.

Table 4

		Existing SFC Insurance Requirement	After Year 1 *(after licensed and have no security breach incidents)*	After Year 2 *(after licensed and have no security breach incidents)*	After Year 3 *(after licensed and have no security breach incidents)*
A	Hot Wallet	100%	97.5%	95%	90%
B	Cold Wallet	95%	90%	85%	75%

8. <u>Our response to the Transition Arrangement mentioned in Part IV of the SFC Consultation Paper</u>

Paragraph 74 of the SFC Consultation Paper mentioned that eligible trading platforms for transitional arrangements will include (i) platform operators currently licensed under the SFO and (ii) VA trading platform applicants under the existing Securities and Futures Ordinance (Cap. 571) ("SFO") regime which have commenced their VA trading platform business in non-security tokens in Hong Kong. We believe that (ii) shall only apply to applicants that have made a license application and SFC has acknowledged receipt of such application before 1 June 2023 to reflect the status of such applicants under the existing regime before 1 June 2023.

Paragraph 74 also mentioned that a VA trading platform must be pre-existing, i.e. in operation in Hong Kong prior to 1 June 2023 and with meaningful and substantial presence. Under the meaningful and substantial presence requirement (which the platform operation is live with considerable number of clients and volume of trading activities in Hong Kong), is there any certain pre-requisite regulatory threshold for such operation? If there is none, there is a risk that new VATPO applicants will just operate in a manner that largely differs from the regulatory requirements under the virtual asset service providers regime of the Anti-Money Laundering and Counter-Terrorist Financing Ordinance (Cap. 615) just to satisfy the minimum requirement for operation, number of clients and volume of trading activities in Hong Kong before 1 June 2023 to be eligible for the transitional arrangements, which exposes investors to higher risks.

As the transitional arrangements aim to provide reasonably sufficient time for VA trading platforms now operating in Hong Kong to either apply for license or close down in an orderly manner, we believe for those platforms who intend to apply for a license, there shall be minimum regulatory requirements for (i) their operation; (ii)the way they obtain their clients and (iii) the way they conducted their trading activities in Hong Kong. For the new VATPO applicants operating in Hong Kong immediately before 1 June 2023, SFC should consider whether they have a meaningful and substantial presence to avoid the abovementioned situation where a lot of new VATPO applicants started running in an wildly unregulated way in order to be included under the transitional arrangements.

9. <u>Our response to the Publication of VA trading platform lists</u>

Paragraph 86-87 of the Consultation Paper mentioned that the SFC intends to publish certain lists on its website to avoid public confusion as to the regulatory status of VA trading platforms. To further facilitate this objective, we hereby purpose the SFC to also include a list of VA trading platforms that had already obtained SFC's acknowledgement of receipt of their application under the existing SFO regime before 1 June 2023. The public will have a better understanding of the regulatory status of VA trading platforms on the existing SFO regime before 1 June 2023 with the publication of such list.

Should you have any comments and follow up questions regarding our recommendations above, please feel free to reach out to us via email or We wish our suggestions could be considered and adopted by the SFC and can help to develop the virtual asset industry and regulatory landscape healthily together in future.

Yours sincerely,

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