

Dear SFC and USM working group members,

I'm writing in response to the consultation paper on a revised operational model for implementing an uncertificated securities market in HK. This is a good initiative to catch up with the rest of the markets.

Understand that the consultation deadline had been passed, I'm writing to suggest, for later phases, that blockchain solution should be considered. Similar implementation had been seen in other markets, e.g., in Switzerland - Daura - a platform for Swiss corporations to digitalize shares register.

The proposed new model in the consultation paper allows investors a choice to hold securities in uncertificated form, whereas preserving existing efficiencies in the clearing and settlement process. This is a good use case to apply blockchain technology for the following reasons:

- Reliable and secure records of transfer and holding of shares - synchronic, immutable, timestamped and verified
- Increase transparency and shareholders' protections
- Enable internationalization of shareholdings with lower costs - listing, marketing, transaction and other ongoing costs
- Further strengthen HK's international financial center position

Blockchain is a distributed database with chained blocks of peer-to-peer timestamped and validated records. Validations would be in the form of cryptographies with timestamped reference. This is to ensure transactions are verifiable without duplication, and hard to be manipulated. Through the use of blockchain, shares are represented by cryptographic blocks of transactions, evidencing shareholdings and transfer of legal titles.

It is suggested open source protocol with permission, i.e., private blockchain, could be implemented for a well balance between speed requirement and transparency. For networking, nodes could be run and managed by share registry and CCASS participants for an integration share registration records. For application, the usage could be as broad as below:

- Investors - view their portfolios and manage their shareholdings and exercise rights
- Issuing corporations - oversee investors profile and analyse trading trends and patterns
- Share registry and CCASS participants - integrate backend platforms for operational efficiency, while maintaining existing relationship with clients
- HKEX, SFC and other regulators - perform regulatory oversights through consolidated records, could also leverage other technologies like artificial intelligence or machine learning to monitor market performance

The above analysis is preliminary. For HK is trying to position as fintech epicenter, it's suggested to go through an in-depth analysis of blockchain solution for USM and see any possible implementation.

Thank you for your consideration.

Yours faithfully,

Margery Wong