



28 September 2020

Senate Select Committee on Australia as a Technology and Financial Centre
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600

By email to fintech.sen@aph.gov.au

Re: Fintech inquiry – Response to Questions on Notice

At ASX's appearance at the Senate Select Committee on Australia as a Technology and Financial Centre on 8th September, 2021 we took several questions on notice. Please find our responses below and let us know if you would like any more information on any matters of if we have inadvertently failed to respond to any questions.

1. Is there a good model overseas for crypto exchanges

Various models exist internationally. The most mature markets to have developed to date are Canada, Switzerland, Singapore and Germany. Here is a summary of where ASX sees some of the major overseas markets:

Jurisdiction	Comments
USA	Complex suite of regulations at Federal and State level. SEC seeking additional powers to regulate crypto-currencies. FinCEN issues licenses for cryptocurrencies and cryptocurrency exchanges. Exchanges must also be registered as money services businesses. Direct listing of cryptocurrencies and crypto ETFs is not allowed, though many blockchain technology and infrastructure firms are listed
Canada	Digital Currency Exchanges required to be registered with Financial Transactions and Reports Analysis Centre of Canada. Canadian Securities Administrators and Investment Industry Regulatory Organisation have issued guidance regarding when existing securities legislation would apply to the activities of a digital currency exchange. Listing of crypto ETFs is allowed and TMX launched first crypto ETF in Feb 2021
Singapore	Payment Services Act (PSA) introduced in January 2020, requires Digital Currency Exchanges to apply for a license, with the provision to operate during the application process. Listing of Crypto ETFs is possible and SGX lists crypto ETFs
Switzerland	Crypto-asset intermediaries dealing with funds over CHF 1M must register for license with FINMA and comply with ICO guidelines and AML / CTF requirement

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Germany	Crypto-assets and intermediaries are regulated and licensed and must register with the Federal Financial Supervisory Authority. Listing of Crypto ETFs is possible and Deutsche Boerse has ETNs based on Bitcoin, Bitcoin Cash and Ethereum
United Kingdom	Regulation to be based on token mapping. Currently crypto-currency ETFs are not permitted and there are no crypto exchanges listed.

2. What sorts of regulatory arrangements should be put in place for crypto exchanges, including capital requirements, key personal arrangements and the like

Any regulation of crypto exchanges should be designed to ensure the following points are considered:

- Responsible conduct
- Key person arrangements
- Proper segregation of participants' assets and private keys from the marketplace's own assets
- Appropriate record keeping
- Maintaining policies and procedures to protect a participant's assets from theft or loss
- Due diligence on partners and participants
- Sufficiency of resources (including financial, technological, people)
- Specifically, for Digital Custody – SOC 2 auditing to ensure appropriate technology controls
- Independent assurance

3. Do you think that the Australian custody system is mature and capable enough?

We covered this in our recent submission however we would add that the domestic system may also need a technology uplift. This would include:

- Disclosure requirements in relation to crypto assets, including disclosure of the terms of custodial arrangements (whether through a crypto exchange or otherwise) and the key risks to users
- Core standards and requirements for digital asset custodians, including in relation to capital, technological, operational and governance matters
- Independent assurance requirements for digital asset custodians, in relation to core matters such as legal title to crypto assets left on the exchange

4. Do you still have no-liability mining companies on the ASX?

There are currently 36 no-liability mining companies listed on ASX.

5. What is your general philosophical approach if an exchange like the ASX is engaging in that major technological innovation which has an impact on a whole range of different market participants? I'm wondering if you could provide some comments in that regard.

ASX has a history of introducing new technology into Australia's financial markets and in many cases this has been the driver of significant improvements in the efficiency of these markets. Examples from ASX's history includes:

- 1959 – The auction-based call system of trading was fully replaced with the post trading system at the Sydney Stock Exchange, allowing continuous trading throughout the day.

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- 1960 – The electronic price dissemination system, Stockmaster, enabled stockbrokers to receive bids, offers and last prices in their offices
 - 1987 – Implementation of SEATS – Stock Exchange Automated Trading System, which ultimately led to the closure of all floor trading in Australian stock exchanges
 - 1989 – Implementation of SYCOM – the world’s first after-hours electronic trading platform
 - 1994-1996 – Implementation of CHESSE, which was a necessary precursor to the dematerialisation of equities clearing and settlement in Australia in 1998
 - 2012 – Opening of the Australian Liquidity Centre – an open infrastructure allowing market participants and their service providers to efficiently and safely connect with the Exchange and with each other.

When introducing changes involving major technological innovation ASX recognises the need to:

- Consult broadly across market participants and stakeholders on the requirements that should be accommodated in the project that implements changes
- Work closely with our regulators to ensure risks are identified and well managed throughout the process
- Engage with our customers on their ability to absorb change – as we recognise that this is a critically important factor informing the speed with which any change is able to be implemented
- Focus on non-functional requirements such as stability, security, recoverability, availability and resilience

<https://www2.asx.com.au/about/asx-story>

Further Information for the Committee

As mentioned at the hearing, Deutsche Boerse has been active in the crypto currency and digital asset space for a number of years – we would take this opportunity to add some additional information.

Their actions have included the establishment of a Business Area focused on “DLT, Crypto Assets and New Market Structures” in 2018, investments in HQLAx (Digital Collateral Registry leveraging DLT) in 2018, 2019 and 2021, and through the majority acquisition of Crypto Finance AG (digital asset trading, storage, and investment firm) in 2021. In addition, this has also included the launch of an Exchange Traded Note (ETN) issued by ETC Issuance based on Bitcoin on Xetra in June 2020, followed by the launch of Bitcoin Cash and Ethereum based ETNs in March 2021.

References that the Committee may find useful:

<https://www.deutsche-boerse.com/dbg-en/products-services/insights-innovation-new-technologies-en/The-transformational-potential-of-the-blockchain-technology-a-conversation-with-Jens-Hachmeister-1398618>

<https://deutsche-boerse.com/dbg-en/media/press-releases/Deutsche-B-rse-Group-acquires-majority-stake-in-Crypto-Finance-AG-extending-its-offering-for-digital-assets-2699048>

<https://deutsche-boerse.com/dbg-en/media/press-releases/World-s-first-centrally-cleared-Bitcoin-ETN-launched-on-Xetra-2062116>

<https://www.deutsche-boerse.com/dbg-en/media/press-releases/Deutsche-B-rse-expands-innovative-centrally-cleared-crypto-offering-on-Xetra-with-Ethereum-and-Bitcoin-Cash-2568710>

<https://www.finextra.com/newsarticle/37244/big-banks-invest-in-hqlax>