

14 February 2017

Office of General Counsel
ASX Limited
20 Bridge Street
Sydney NSW 2000

Attn: Ms Diane Lewis
Senior Manager
Regulatory & Public Policy

By email: regulatorypolicy@asx.com.au

Dear Ms Lewis,

ASX's Replacement of CHESSE for Equity Post-Trade Services: Supplementary Business Requirements Questionnaire

EXECUTIVE SUMMARY

1. Federal Government commitment to competition and innovation in financial markets

As recognised by the commitment to opening the Australian equity financial market to competition in Clearing and Settlement in 2016, the current market infrastructure, specifically the vertically integrated, monopoly market structure of ASX, is incompatible with this policy position.

Under the current model, ASX is the sole supplier of:

- Settlement related services to all issuers;
- Settlement of secondary market trading, primary market and subsequent capital raisings;
- investor and asset registration and services for issuers; and
- clearing services.

The implication of these services being provided by a single vertically integrated provider is that innovation and enhancements that deliver efficiencies to the market and its users has been slow to materialise.

Furthermore, hidden within these services are functions and products that would ordinarily be contestable but are otherwise locked within the monopoly framework, stifling innovation and competition.

NSX welcomes the process of consultation surrounding a replacement system and structure, and anticipates that the outcomes will include a more vibrant attitude of innovation and change across market users.

NSX therefore expects that the changes contemplated through this change will pave the way for vibrant and unencumbered competition in all areas of the market infrastructure; Listing, Trading, Clearing and Settlement.

2. International precedent

In most of the global equity markets, including the United States of America, Europe and Japan, Central Securities Depositories (CSDs) provide post-settlement and asset registration functions as a utility service, to separately support competing Listing and Trading venues.

These international markets are structured in this way to manage the inherent conflicts and inefficiencies that exist between the listing and trading function of an exchange and the post trade and registration functions of a settlement facility.

NSX therefore see the need to consider not only the technology but also the structure of the rule and regulatory settings of provider.



3. Only a utility structure provides the essential objectivity and independence

An integrated vertically owned and operated settlement infrastructure, bundled with investor and asset registration and services, will not position Australia as an open innovative marketplace for the future.

This is because such a structure preserves a backward compatible model at a time when a single national market served the national interest. Whereas, in today's environment of open competition, and ease of access to rapidly evolving technology, innovation will thrive in a setting with open access, serving multiple markets on equal terms.

4. Evolution of a best practice asset register structure

NSX supports the current name-on-register structure and the removal of current inefficiencies spanning the subregister model. However, we have a firm view that access to the investor and asset register should be on open and equal terms to all market operators, their issuers, participants and others who have an interest with the end investor.

5. Open standards and global compatibility

NSX is concerned that at present specifications do not provide for open access for the settlement of globally listed securities, or multicurrency settlement.

NSX believes that open access to the new settlement system(s) is critical given the internationalisation of equity capital flows and investment.

6. Inappropriate governance framework

NSX points to ASX's own CHES Replacement Principles which we do not believe support an open access, multi-market and industrywide solution to position Australia as the next-generation location for business for the following reasons:

- ASX states it aims to provide issuers and end investors with greater control and confidence through secure and simplified access to their data. This implies to cement a stronger commercial relationship than it already has with NSX's issuers and investors holding NSX securities.
- A second principle states that the new infrastructure needs to meet and respond to changing local and global markets, and promote further innovation through new levels of functionality, open standards and flexible technology. Whilst NSX agrees with this vision, it implies that ASX will be the vertical gatekeeper to determine how it will meet, respond, and promote further innovation.



DETAILED DISCUSSION

We refer to the *Supplementary Business Requirements Questionnaire*. It is NSX's understanding that this additional requirement was driven by the industry's feedback to date on ASX's business requirements gathering exercise so far, as part of ASX's broader industry consultation exercise.

In the completion of our answers to the ASX questionnaire, we have incorporated aspects that we believe are vital to the continued importance of Australia as a world class marketplace.

NSX would like to draw attention to the fact that we are currently the second largest cash equity market in Australia and the largest exchange customer to access the infrastructure for issuer, settlement, investor and asset registration services, for which the ASX Group is the sole supplier.

The business strategy of NSX is formed on the belief that a truly competitive, innovative and dynamic marketplace provides the only platform for the Australian equity market to compete globally. As such we have been considered with our responses where we believe there is a conflict with NSX's longer term interest as a competitor of ASX should it continue in its role as a vertically integrated exchange and main provider of core post-trade functions.

NSX does not believe that this is a sustainable market structure which will position Australia as an innovative centre of competitive market excellence to fully grasp the opportunities that lie ahead. This is because, innovation will thrive in an environment with open access, serving multiple markets on equal terms.

Key Principles

1. Federal Government's commitment to competition and innovation in financial markets

NSX is a firm supporter of innovation. As such, we see technology as an enabler to drive this innovation.

The Federal Government has stated its commitment to competition and open access on non-discriminatory terms to drive innovation across financial markets. As such NSX encourages The Council of Financial Regulators to actively pursue this mandate on behalf of The Federal Government. In regards competition in cash equities markets, a reasonable outcome should position all market operators, current and possible new ones in the future to access core settlement, investor and asset registration and services on equal terms – operationally, technically and commercially.

Innovation by market operators and importantly, stakeholders such as issuers, participants, registrars, technologists, Fintechs and others will be a natural extension of this competition. As such, NSX has a view that settlement is largely a utility function, where it is used by all market operators and participants to ensure a seamless delivery vs payment conclusion to a trade or related transaction. Naturally, the importance of privacy, security and operating rules around investor and asset registration and services cannot be underestimated as it is as vital as the core settlement function itself. Hence, these functions can also be considered a core utility function. We discuss this further below in Point 4.

The table below demonstrates such a potential competitive, innovative marketplace.

Market Segment	Competition	Potential Innovation Drivers
Pre-Trade	Listing Market Operators (NSX, ASX, SSX, Others)	Listing Markets, Financial Product Issuers, Participants, Fintechs, Regulation
Trade	Trading Venues (NSX, ASX, Chi-X, SSX)	Trading Venues, ECNs, Participants, Technologists, Fintechs, Regulation
Pre-Settlement	Clearing Houses (e.g. ASX Clear, Others in future?)	New Entrant Clearing Houses, Financial Product Issuers, Participants, Technologists, Fintechs, Regulation
Settlement	Securities Settlement Facility (utility function to provide trade closure through DvP settlement for Trading Venues on equal terms)	Listing Markets, Financial Product Issuers, Trading Venues, Clearing Houses, Participants, Registrars, Technologists, Fintechs, Regulation
Post-Settlement/ Asset Services	Investor and Securities Registration Facility	Listing Markets, Financial Product Issuers, Trading Venues, Clearing Houses, Participants, Registrars, Investors,



Market Segment	Competition	Potential Innovation Drivers
	(Utility function to provide Open Access to all stakeholders on relative equal terms)	Consolidators, Technologists, Fintechs, Regulation
Secondary Capital Raisings/Primary Market	Securities Settlement Facility (utility function to provide issuers on Listing Markets DvP settlement for capital raisings)	Listing Markets, Issuers, Trading Venues, Clearing Houses, Participants, Investment Houses, Registrars, Technologists Fintechs, Regulation

2. International Precedent

In most global markets, Central Securities Depositories (CSD) provide post-settlement and asset registration functions mostly as utility services to separately support listing and trading venue.

Internationally, there is recognition of the inherent conflicts and inefficiencies in a model where a vertically integrated monopoly provider services the entire end-to-end market. In most global markets, Central Securities Depositories (CSD) provide settlement and asset registration and services mostly as utility services to separately support listing and trading venues. Examples include:

United States of America: Depository Trust and Clearing Corporation (DTCC) provides a CSD service to settle and maintain asset registration and services as a utility for NYSE and NASDAQ, regional exchanges and electronic communication networks (ECNs) in the U.S.

Europe: Clearstream and Euroclear compete for CSD services in most main European Markets including France, Germany, Sweden and UK. Although Clearstream is owned by Deutsche Börse Group, it not a monopoly provider in the European market. Europe has further enhanced the concept of open access and choice with the introduction of TARGET2 Securities (T2S) which will allow interoperability in settlement across all European CSDs.

Brazil: Brazilian Clearing and Depository Corporation (CBLC) provides acts as a CSD to serve the Brazilian Securities, Commodities and Futures Exchange (BM&FBOVESPA). The CBLC was established as a spin-off from BM&FBOVESPA and is owned as 'a for-profit' corporation owned by market participants.

Japan: Japan Securities Depository Centre (JASDEC) acts as a utility to provide CSD services to the Japan Exchange Group.

Other: Examples of vertically integrated market operators include Singapore (SGX) and Hong Kong (HKEX) where these exchanges are protected against local and international competition from other exchanges.

An important distinction between CSDs where securities are mainly held in omnibus or nominee form and the Securities Settlement Facility (SSF) structure of the Australian market supported through CHES is that it actively supports 'name-on-register' as well as nominee and omnibus forms of registration.

NSX is a strong advocate for maintaining the 'name-on-register' structure but under are model which promotes open equal access. We discuss this further in Point 4 below.

3. Only a utility structure provides the essential objectivity and independence

An integrated vertically owned and operated settlement infrastructure, bundled with investor and asset registration and services, will not position Australia as an open innovative marketplace for the future. This is because such a structure preserves a backward compatible model at a time when a single national market served the national interest. Whereas, in today's environment of open competition, and ease of access to rapidly evolving technology, innovation will thrive in a setting with open access, serving multiple markets on equal terms.

The global examples support a more utility based approach to the core settlement functions as well as investor and asset registration. This will provide the essential objectivity and independence to once again steer the Australian market to the forefront of innovation as was the case when CHES was launched as the first fully dematerialised market in the world. This was achieved as a market wide initiative when ASX was a mutual organisation, meeting the needs of a single market at the time. This is no longer the case.

4. Evolution to a best practice asset register structure

NSX supports the current name-on-register structure and the removal of current inefficiencies spanning the subregister model. However, we have a firm view that access to the investor and asset register should be on open and equal terms to all market operators, their issuers, participants and others who have an interest with the end investor.



The process of investor registration, i.e. the creation of a Holder Record necessarily precedes asset registration, i.e. the creation of a holding in a company or investment product. As such NSX sees these features of the market as core utility functions, similar to the settlement function. A key unique feature of the name-on-register model is the look through capabilities to the end investor. As technology continues to evolve along with the sophistication and demands of investors for content and value-added services, open access on equal terms to the register will fuel an innovation mindset through competition to continually fulfil the needs of not only investors, but also issuers, participants, regulators and other stakeholders. This has the potential to position the Australian market as a leader with a best practice asset register structure supported by innovative overlay services.

Therefore, a critical debate is the ownership, access, control, usage and commercialisation of this data. NSX does not believe that the full potential and intention of The Federal Government's commitment to competition and innovation will be achieved where critical settlement, investor and asset registration services are provided by a monopoly operator who leverages the provision of these functions to potentially extend its footprint to provide other tied services for commercial gain in the future. Nor is it feasible for it to act as the sole gatekeeper to determine the time of innovation provided by others potentially for its own commercial benefit which may not necessarily be in the interest of a multi-market environment.

5. Open source and global compatibility

As discussed above, NSX believes that open access to the new settlement system(s) is important. As such NSX supports the logical move to ISO20022 introduction of settlement messages in line with global standards as this will lead to a likely reduction of participant costs and promote harmonisation with global markets.

We note that there is no design suggestion for open access for the settlement of globally listed securities, or multicurrency settlement. As such, we have included this suggestion in the response to the Supplementary Questionnaire.

As an operator of a listing and trading venue, we welcome any further discussion on this topic.

6. Inappropriate governance framework

NSX points to ASX's own CHES Replacement Principles which we do not believe support an open access, multi-market and industrywide solution to position Australia as a next-gen location for business for the following reasons:

- First, ASX states it aims to provide issuers and end investors with greater control and confidence through secure and simplified access to their data. This implies to cement a stronger commercial relationship than it already has with NSX's issuers and investors holding NSX securities.

Importantly, there is no recognition of, improved services to multiple market operators, participants or other critical service providers such as registrars.

- A second principle states that the new infrastructure needs to meet and respond to changing local and global markets, and promote further innovation through new levels of functionality, open standards and flexible technology.

Whilst NSX agrees with this vision, it implies that ASX will be the vertical gatekeeper to determine how it will meet and respond to and promote further innovation, assuming for a commercial benefit as opposed to being necessarily motivated to driving multi-market-wide efficiencies.

NSX's response to the Questionnaire is attached.

Yours sincerely,

(sent electronically without signature)

Ann Bowering
Managing Director



Part A – Post Trade Overview

Q1. Please identify the top three services that support you well in the current ASX Equity Post Trade market infrastructure and why.

Top Three:

1. The provision of settlement services for trading that occurs on NSX. The benefits of adopting market standard systems and practices for post trade activities has enabled NSX issuers and market users consistent access to settlement and registry functions.
2. The ability for all NSX Issuers to submit Corporate Actions while also updating the information for the securities that is maintained by ASX.
3. Access to the Primary Market Facility for NSX issuers provides consistent access for the purposes to raise capital prior to listing and delivers efficiencies for the issuer and its investors.

The provision of these services provides significant market efficiencies which therefore enables access to multiple investment opportunities for investors, and broadens the opportunity for capital formation of issuers.

We note that these are all essential services to the operation of the National Stock Exchange of Australia. NSX would be unable to compete as a listing exchange without access to these services.

Additional Services:

4. NSX is a General Settlement Participant of ASX Settlement for the purposes of acting as settlement agent for some participants of the exchange. In this capacity NSX is reliant on the functionality within the CHES PC product to perform critical operational activities.
5. Chess Depository Nominees P/L, a wholly owned subsidiary of ASX Settlements P/L, provides Chess Depository Interest services to NSX Issuers. We note that they are the only provider of this service at this time. This services is required by foreign issuers where their issued securities are not capable of settlement within the present CHES system. NSX Issuers should be ensured continued access to the services of CHES Depository Nominees and access to the creation of CHES Depository Interests to the same extent that is available to ASX Issuers.

Q2. Please identify the top three items in the current ASX Equity Post Trade market infrastructure you would like to change and detail why.

1. The ability for NSX Issuers to submit Corporate Actions directly to ASX would greatly enhance and streamline the processes used by NSX Issuers and deliver automation to the functions currently performed by the issuer, its registry and NSX.
2. The development of CHES PC to use the latest windows operating system (Windows10) to ensure that future changes in technology do not impede the ability of the application to function and ensuring that security is maintained.
3. International compatibility through simpler access by offshore issuers to settlement and asset registration services, and a re-evaluation of how multi-currency settlement could operate, would greatly assist offshore issuers in managing their share register and interactions with investors within a single system with extensive access.

Q3. If you had one post trade priority, what would be the key business enabler to benefit your business organisation and why?

1. Corporate actions submission. Currently corporate actions for NSX issuers are submitted by NSX via spreadsheet which is suitable for low volumes, however as the market grows this function will need a more efficient and streamlined submission process that can be used directly by NSX issuers.



Part B – Account Structure

Q1. Please identify account structures that would support your business.

a) What other account structures do you require – other than those already available?

Intentionally left blank.

b) What other account structures or additional information can we offer to facilitate an efficient client asset management and reconciliation in your firm in equity clearing and settlement operations? What other benefits can these changes bring about?

As noted in our covering letter, NSX does not see the process of client asset management and account reconciliation as the role of a monopoly provider to commercialise.

NSX believes that there should be non-discriminatory, equal and open access to this information by issuers, Market Operators, Participants and other stakeholders (including registries) to allow for the mechanisms of competition to drive innovation in product development and customer solutions. Any enhancement to settlement services should be assessed with a view to reduce costs for both the facility operator and users.

c) Can we describe the impact (all pros and cons) of adopting a common account structure (e.g. HIN, SRN, name on title, omnibus)?

It is NSX's view that the benefits of a common account structure lie with an open access model where the investor and asset registration functions, along with settlement, are provided as **utility services** on non-discriminatory, equal and open terms. NSX believes that utility services exist to meet industry requirements and create an environment for the creation of value add services.

This is what will drive innovation, by Market Operators, Participants, Fintechs, other technologists and stakeholders to develop and deliver overlay services to Investors, Issuers, Participants, Regulators and new unforeseen consumers of content.

Conversely, innovation through openness and equal access would not develop with a monopoly provider controlling access to data and creating opportunities for its own commercial gain.

Q2. The potential introduction of a market wide unique Client Identifier in Australia would allow consolidated management of client positions, funding, settlement and reporting.

a) What additional services would a Client Identifier facilitate?

NSX expects that in the preceding 12 months of analysis, ASX have considered potential additional services and ask that in the spirit of this consultation.

ASX should provide the market with preliminary insights into the opportunities it has assessed so the market can provide considered feedback.

The existence of a market wide Client Identifier would deliver benefits for issuers, registries and market users through enhanced access to trace and record client information from the across the market.



b) What opportunities and challenges would you associate with its potential adoption in Australia's equity market?

NSX believes the opportunities and benefits of adopting a market wide client identifier will come with open access on equal terms. This will provide the environmental settings to promote innovation where solution providers will continue developing for points of difference in their offerings resulting in both choice and price differentiation for the consumers of these services.

Challenges exist in convincing users who are impacted of the benefits of change. Open access on equal terms, where the core functions of investor and asset registration are provided as utility services to benefit all users and stakeholders, will assist galvanise the industry to address these challenges and develop an approach that deliver a benefit to users.



Part C – Clearing & Settlement Services

Q1. Settlement is currently batch oriented – what impact do you anticipate if the batch processes were optimised / reduced and how would such changes impact your internal processes?

As an operator of an approved listing market that uses these settlement services, NSX, would support any optimisation which is supported by its participants, market users more broadly, and regulators and improves the Australian Market and its competitiveness globally.

Q2. Have you identified any Clearing & Settlement efficiencies which can reduce your operating costs/effort or reduce the processing timeline, including the processing timeline of various Settlement Instructions for matching/settlement schedules, payment deadlines and the overall settlement timeline?

As an operator of a listing market, NSX views post-trade services as a utility service which should support all listing and trading venues on equal and with non-discriminatory terms. As such, NSX supports any further efficiencies that would reduce market risks and/or costs which are supported by its participants, regulators and improves the Australian Market.

Q3. Would it be beneficial to your business and/or clients if ASX were to act as the golden source (i.e. true/original/accurate source) of corporate action information? Would the distribution of corporate actions data in the standardised messages (e.g. SWIFT 20022) allow you to manage your business more efficiently and effectively? Can you describe how this service would benefit your business?

NSX is in the unique position where it must share both its customers and its data with a competitor. For example, it supplies corporate action data to ASX for the issuers listed on NSX's market.

It is therefore essential that NSX maintains the rights and ownership of data for NSX listed issuers irrespective of the development and innovation take by ASX Settlement.

NSX does see a benefit to distribute this information over such as service and would expect a reciprocal benefit being provided to NSX by ASX distributing its data.

Q4. Do you think the acceptance of standardised instructions (e.g. in ISO 20022 format) from participants of ASX for voluntary corporate actions such as voluntary corporate action election, subscription and submission of voting and proxy appointment would be beneficial for your business? In what areas do you expect this offering would benefit your firm and/or your clients?

NSX is supportive of any improvements and efficiencies that drive by the use of global standards that places the Australian Market in a more competitive position.

Q5. What improvements to ASX's Primary Market Facility (e.g. DvP settlement of primary and secondary capital raisings) or new issue processes and tendering services would benefit your business?

NSX Issuers utilise PMF to obtain efficiencies in their capital raising activities prior to listing.

We see PMF as an example of an embedded contestable service, and an area where NSX believes that further competition will drive innovation for the benefit of the market as a whole.

NSX's position is that it will support competition in this space whether the services are provided by ASX or another entity.



Part D – Risk Management

Q1. What type of Risk Systems do you rely on for calculating your risk exposure?

NSX is currently not a user of ASX Clear but supports competition in the clearing of the Australian equity market.

Q2. What additional tools would allow you to better manage your risk?

- a) Do you need the ability to execute real time, intraday “What-if” margin analysis on hypothetical portfolios? If so, how would you like this capability to be implemented? E.g. online calculator or Application Program Interface (API) or other forms or interface with internal systems?

Intentionally left blank.

- b) Would additional stress testing or reporting functionality be useful? If yes, please elaborate key features which would be beneficial e.g. intraday stress test loss calculations?

Intentionally left blank.

- c) Within the context of Default Management, are there changes to be made to better support your equity clearing business?

Intentionally left blank.



Part E – Collateral Management

Q1. Please confirm your preferred top two non-cash, high quality assets for collateral posting purposes.

Intentionally left blank.

Q2. By introducing a centralised collateral pool to be utilised across multiple clearing houses, what benefits do you envisage and what impact (operational and technical) can you identify for both cash and non-cash collateral?

Intentionally left blank.



Part F – New Products and Services

Q1. Please provide as much detail as possible on how the potential service offerings listed above may assist your business development?

As a market operator that competes ASX for listings and trading, NSX consider that any new services that extend core utility post trade services, like those described previously, should exist to the benefit of all market operators, their issuers, investors and participants.

As such, open access to data should be pursued to enable innovation to thrive through competition rather than being provided or gatekept solely by a monopoly entity for its own commercial gain.

Q2. Are there other post trade services not mentioned that you would like ASX to consider?

Intentionally left blank.



Part G – Clearing House Consolidation

ASX has two Clearing Houses operating under separate legal entities.

Q1. Where can we pursue a single entity multi-asset Clearing House, which aspect of consolidation would allow you to achieve greater capital efficiency?

As the operator of a listing and trading venue, NSX is interested and supportive in the competition in clearing arising from a new entrant to the Australian market.

Please provide further details supporting your answers above.

NSX believes competition that arises from a new entrant will drive greater innovation and reduce clearing costs to Market Operators, Participants and market users broadly.

Q2. Multi-asset Clearing House

- a) If we could pursue a single entity multi-asset Clearing House and refine the membership criteria appropriately, will you look to reduce the number of your own entities accessing ASX, where you have multiple membership/participant entities?**

Intentionally left blank.

- b) What support would you require from ASX to allow to achieve that consolidation?**

Intentionally left blank.



Part H – Technology

Q1. Would a direct electronic interface or API connection with ASX's equity post trade platform benefit your company? Yes or No and why?

Intentionally left blank.

a) If yes, what type of information and instructions should be supported?

In general, the electronic interface or API should support the most commonly and widely used that adhere with standard practice and instructions and frameworks that appropriate within financial industry.

b) What message protocols preferred (e.g. ISO 20022, FIX, etc.)?

FIX and ISO 20022 are both standard message protocols.

NSX currently supports the FIX protocol and would support ISO 20022 if this were to be the preferred message protocol chosen adopted by the market.

Q2. Would your firm be open to exploring the usage of emerging financial technologies (e.g. Distributed Ledger) where these can bring efficiencies to the market?

NSX is open and supportive of the innovation in technology.

Emerging financial technologies that bring greater efficiencies, provide ease of access to liquidity and transparency to the overall financial market infrastructure, should be assessed to drive the outcome of business innovation and continued presence of the Australian market as a key player in global market.

Q3. Is your firm currently engaged in, or planning to engage in, any similar developments in other markets? If so please elaborate on the nature

As previously stated, NSX is supportive of innovation and sees technology as a strategic enabler across the market.



Part I – Vendor/System Provider Management

Q1. Please provide information that will assist ASX when considering implementation issues.

a) Do you maintain your own post trade infrastructure or do you utilise the services of a system provider?

As noted in responses to Part A, NSX is a user of CHESSE PC and is reliant on the connectivity and functionality provided by ASX Settlement in delivering the service.

NSX Participants utilise a variety of post trade systems, some in-house, some by third-party providers.

b) If you use the services of an IT provider, please confirm the name of the firm?

Intentionally left blank.