

15 February 2017

Regulatory & Public Policy Australian Securities Exchange 20 Bridge Street SYDNEY NSW 2000

By email: regulatorypolicy@asx.com.au

ASX's Replacement of CHESS for Equity-Post Trade Services-Supplementary Business Requirements Questionnaire.

Stockbrokers and Financial Advisers Association Members (Members) welcome the opportunity to provide input into the Supplementary Business Requirements Questionnaire issued in December 2016 (Questionnaire). Members acknowledge and thank ASX for addressing the request tabled at the Business Committee meeting held under the Code of Practice (Business Committee) to publish the Questionnaire.

This response expresses the considered and representative views of global broker dealers, global custodians, third party clearers, domestic retail full service and non-advice firms (CS Participants) and Approved Listing and Market Operators who are direct users of CHESS (together Users). The views expressed in this submission, supplements the Members' response to "ASX's Replacement of CHESS for Equity Post –Trade Services September 2016 (Original Consultation).

Members recognise that the process of consultation has just started and welcome ongoing engagement. To facilitate progressing discussion with ASX, Members will highlight their expectations on: strategy and vision, a roadmap and meeting The Council of Financial Regulators' October 2016 Policy Statement on Regulatory Expectations for Conduct in Operating Cash Equity Clearing and Settlement Services in Australia (COFR Regulatory Expectations). Members request that in response ASX confirms its strategic vision and a roadmap for CHESS Replacement including committed timelines. The strategy should clearly include measures necessary to meet COFR Expectations.

Users Strategy & Vision

A significant majority of Users believe that, to date, ASX has not clearly articulated its strategic vision for CHESS Replacement and has not allowed for a strong voice in system design and strategy setting as required by COFR Regulatory Expectations.

Members acknowledge and thank ASX for addressing the request tabled at the December 2016 Business Committee, to allocate sufficient time to debate Members views on the Strategy & Vision for CHESS Replacement in the forthcoming March 2017 Business Committee.

Members further commend the exploration of a broader range of post trade considerations, as reflected in the Questionnaire.

Consistent with the views expressed in Members Original Consultation response, Members again affirm their highest strategic priorities and vision for CHESS Replacement are to:

- remedy structural and service inefficiencies in the current market structure including development of corporate actions and asset registration improvements;
- reduce ASX explicit costs for Clearing & Settlement by a minimum of 20% including clearing house capital costs associated with clearing and operational
 capital associated with settlement;
- reduce CS Participant implicit costs by a minimum of 20% including capital costs associated with clearing and operational costs associated with settlement; and
- follow global best practice in clearing and settlement operating models and global ISO20022 standards to provide global scalability and take Australia forward for the next 20 years.

ASX has acknowledged more needs to be done to address Corporate Actions in potential Day 1 solutions for CHESS Replacement. Members further request ASX address strategic options for the fragmented sub-register system. When considering how best to affect corporate actions solutions, Industry should debate the current CHESS sub-register assumptions and work closely with Registries.

Members welcome opportunities to review clearing house consolidation (Part G) as a potential opportunity to deliver reductions in clearing house capital whilst also continuing to meet robust regulatory standards. This is an opportunity to reduce ASX explicit costs for clearing.

Members further recommend complementary strategic objectives for CHESS Replacement should:

- materially reduce risk for ASX & CS Participants; and
- target harmonisation objectives and systems integration for clearing (multiproduct clearing) and settlement (multi-asset depository) for equity and fixed income asset classes.

While Members have indicated these as moderately important, their priority could be elevated if they could materially reduce ASX explicit and CS Participants implicit costs. Key sections of the questionnaire including account structures (Part A) clearing house consolidation (Part G) and technology (Part H) are more relevant if harmonisation is seen as the most effective mechanism for delivering cost saving objectives. Otherwise Members see many opportunities for ASX to provide a future harmonisation roadmap for non-technical requirements, through the Forward Work Programme under the Business Committee.

Members commend the initiative of ASX to offer new products and services for CS Participants (Part F). With the exception of corporate action improvements and ISO 20022, our surveyed Members indicated that these were a lower strategic priority.

Members would like to better understand ASX's expected new product roadmap beyond 2020 and some Members continue to raise concerns as to whether ASX intends to offer Investor services, in competition with CS Participants through the changes envisioned in CHESS Replacement and Distributed Ledger Technology (DLT). Members seek reassurance and again request that ASX affirm in their guiding principles that CHESS Replacement should operate with the highest priority for the benefit of CS Participants who are ASX's clients and the primary users of CHESS.

Finally, Members also share a strategic vision for a vibrant competitive equity capital market in Australia. Members continue to seek an understanding of the context of DLT in CHESS Replacement and also to ensure that, in presenting operating models for CHESS Replacement, services are clearly demarcated as outlined in Members' response to the Original Consultation. Industry should debate the current CHESS sub-register assumptions and the limits of service access for Approved Listing Market Operators.

Questionnaire- Business Requirements

Members have sought to provide guidance, where possible, in their response to the Questionnaire. In some instances responses are more relevant at an individual firm level.

Business Requirements have been prioritised in accordance with Members' highest strategic priorities. Members note their assessment of the Questionnaire has been hampered by insufficient information. The Questionnaire is largely modelled on a paper

issued by Hong Kong Stock Exchange Group. It should be noted that prior to the issuing of the Hong Kong Questionnaire a clear strategic vision for post trade was provided by the Hong Kong Exchange in a detailed vendor Request for Information that provided necessary pre-information and context for the questionnaire (12 July 2016).

CS Participants cannot adequately assess business requirements, opportunities, risks, costs and benefits without adequate information. Members therefore request that future consultations address this. Members believe it is:

- highly important to provide clear walk throughs of the business operating model for the service/enhancement being proposed or reviewed;
- highly important to provide more detailed consultation briefing papers including adequate comparative information; and
- important to provide supporting studies on best practice from international or low cost markets.

Some of the topics covered in the Questionnaire are not dependent on CHESS Replacement and our Members recommend these priorities be considered in the Forward Work Program as part of the Business Committee. Greater supporting analysis is required in order to determine the relative priorities with and within CHESS Replacement.

Users Expectations on a Roadmap for CHESS Replacement

ASX has indicated that consultation has just started for the business requirements for CHESS Replacement. Members have sought guidance on the roadmap and, importantly, committed timelines for key decisions. To date ASX has only indicated that it plans to make a decision as to whether DLT will be adopted for CHESS Replacement by December 2017 and that further timelines would only be provided after this date.

Members believe that in order to make a vendor and technology choice the Strategic Vision and Business Requirements should be concluded within the timeframe set by ASX. In a survey of our Members, it was the strong recommendation of the majority of our Members that;

- ASX should conclude the strategic vision, including user input into the strategy, within 3 months (i.e. May 2017); and
- ASX should conclude the high-level business requirements before the decision on DLT in December 2017, with many believing that this should be sooner.

Users Expectations and COFR Regulatory Expectations

Members acknowledge and thank ASX for addressing the request tabled at the December 2016 Business Committee to revise the Code of Practice to align to the COFR Regulatory Expectations. This will be reviewed in the forthcoming March 2017 Business Committee. The same meeting will also address the revised Business Committee Charter.

This will be an important opportunity for Members to also understand how ASX plans to address COFR expectations on "input on the setting of the (CHESS Replacement) investment strategy". It is the view of Members that this is best affected through a commitment from ASX to all of the following.

- Input through bilateral engagement with Users.
- User Input into ongoing formal and detailed consultation.
- Business Committee endorsement of key recommendations from formal consultation.

This is consistent with the view expressed in Members' response to the Original Consultation, and includes the final decision on DLT.

The March 17 Business Committee will be an important opportunity for Members to understand how ASX plans to address COFR Regulatory expectations on prompt investment in CHESS Replacement. While recognising this is a very subjective criteria, Members' expectations are that prompt investment could see the first participants transition to the replacement system in three years from now and certainly before five years, while still allowing for adequate industry transition.

Conclusion

Members continue to advocate for a strong voice in the context of strategy and system design for ASX's monopoly cash equity clearing and settlement services. Members welcome ASX's recognition and formalisation of continued engagement during the current decision making period. Members also will continue to monitor that COFR Regulatory Expectations for direct accountability to CS Participants are honoured.

By reconsidering their highest priority strategic objectives and with greater alignment of expectations on the roadmap for CHESS Replacement, Members are better placed to confidently determine whether CHESS Replacement can achieve a net benefit for Users.

Members appreciate the opportunity to provide comments in respect to this Questionnaire and would welcome further and ongoing engagement with ASX. Should you require any additional information or wish to discuss further any of the matters raised in this Submission, please contact me or our Policy Advisor: Danielle Henderson (dhenderson@stockbrokers.org.au).

Yours sincerely

Andrew Green
CHIFF FXFCUTIVE

QUESTIONNAIRE RESPONSES

Part A Post Trade Overview

Q1. Please identify the top 3 services that support you well in the current ASX Equity Post Trade market infrastructure and why?

Please refer to individual firm submissions.

- Q2. Please identify the top three items that current ASX Equity Post Trade Market Infrastructure you would like to change and detail why?
- 1. Remedy structural and service inefficiencies in the current market structure that will:
 - facilitate development of corporate actions services including information flow and the instruction handling feedback loop; and
 - improve asset registration processes.
- 2. CHESS Replacement should deliver a minimum target of 20% in cost reductions including both ASX explicit costs and CS Participant implicit costs.
- 3. CHESS Replacement should follow global best practice in clearing and settlement operating models and global ISO20022 standards.
- Q3. If you had one post trade priority, what would be the key business enabler to benefit your business organisation and why?

Please refer to individual firm submissions.

Part B Account Structures

Q1. Please identify Account Structures that would support your business a) What other account structures do you require- other than those already available.

On review of the clearing facilities across cash markets, exchange traded options and futures; there are 3 different models for account structures. The nature of account structures varies at the Clearing House (CCP), The Clearing Participant (CP) and the Client for all three products. The margin application at the CP level also varies (gross or net). When considering asset safekeeping, ASX also runs different asset holding account models and structures for Settlement Participants (SP) and Client. Only CHESS offers the sub-register Legal name on Title. Austraclear runs a central securities depository for fixed income assets. Members recognise that this is a reflection of history.

Should ASX's strategic vision target **harmonisation objectives** and systems integration for clearing (multi-product clearing) and settlement (multi-asset depository) for equity and fixed income asset classes, then this would necessitate a migration towards more standardised models and account structures.

While our members have indicated harmonisation as a moderately important strategic priority, this priority could be elevated if it could materially reduce ASX explicit costs and CS Participants implicit costs. Our Members anticipate that this could be achieved through single vendor implementations and savings on connectivity and support costs.

We note ASX announced in May 2016 that it would consolidate its three clearing systems onto one platform based on NASDAQ's Genium I-Net systems as well as Sentinel for the Risk Management systems. It was anticipated this would deliver flexibility, reduced complexity and scale efficiencies. Members request ASX clarifies its current strategic position on clearing integration, including whether the adoption of DLT changes this strategic position. ASX should also provide a roadmap for post trade and CHESS Replacement as a matter of urgency. We suggest reference be made to the Hong Kong Exchange's Request for Information document which envisaged a future state for post-trade platforms and request ASX provide similar guidance, See Annex 1.

As indicated in our response to the Original Consultation, Members support multi-asset depository capabilities in future phases, noting that this benefit is likely to be limited to global broker dealers and custodians. Again, Members request ASX clarifies its current strategic position on multi-asset and depository integration including whether the adoption of DLT changes this strategic position or is intended to apply for equity and fixed income.

Regulatory Standards should also guide the CCP Account structures: CPMI-IOSCO Principles for Financial Market Infrastructure and the RBA Financial Stability Standards. These principles reflect the need for segregation of client activity and the provision of optional levels of protection. Expectations for account structures include:

- a house and client split at the CCP and CP level;
- the operation of a client omnibus account at the CP level; and
- the option to elect into/out of increased protection models for client positions of individual client accounts (equivalent of the current HIN).

Portability arrangements in the event of a CP defaults are relevant in the event of fully paid for and unencumbered Client assets.

Many of the worlds leading CCPs have already progressed towards standardised account structure offerings and multi-product clearing capabilities. Progress here would be consistent with the strategic objective of a CHESS Replacement that meets **global best practice in clearing.**

¹ Reference Figure 2 RFI HKEX Next Generation July16.pdf

Members recognise that account structures and regulatory expectations were reviewed in 2013 with reference to cash market clearing. No changes were made to the single account at the CCP, but instead protection was addressed at the individual HIN settlement level with changes to trustable procedures.

The current netting arranges are highly effective and Members note the potential cost impact to participants for material changes in account structures and core processes. Members could benefit from a detailed review as to whether alternative account structures can be accommodated on an "Opt In" basis where CS participants consider sufficient potential long-term net benefits may exist.

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

At present there is little cross product margining offered by ASX. Account structure harmonisation could advance offerings. We note that there could be significant market benefits from:

- advances towards cross product margining for the Index Options and Futures; and
- optimised equity option clearing /collateral management.

This could reduce the margin costs for participants and clients active in those products, though of little benefit to equity clearing clients.

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

Standardised account structures would have the following benefits.

- Support the ability for the CCP and CP to provide uniform account structures to clients with flexibility in choice in the level of protection and costs.
- Be a pre-condition for the CCP and CP's ability to maximise margin offsets between like account types (Part D) across clearing facilities.
- Be a precondition to maximise the ability to allow for collateral to be lodged and maintained at the account level, where material (Part E). We note the current prohibition on allowing a pass-through of the equity Cash Market Margins (CMM) from end clients. Benefits here may be limited to General Clearing Participants.
- Support the ability of the SPs to have standard asset holding models with flexibility in offering clients different levels of asset protection and therefore costs.
- Be relevant to clearing-house consolidation (Part G).

Equity CS Participants do not underestimate the potential cost impacts from a migration away from the existing cash market account structures. A significant benefit of the single House Account at the CCP level for cash equities is that it provides for the optimal netting of obligations. At the securities level this minimises messaging costs per line of stock; for cash management it allows clearing firms to

minimise their funding requirements and liquidity and treasury management needs.

ASX could assist CS Participants understanding of these potential impacts through modelling and quantifying the simulated changes, as well as demonstrating how impacts can be mitigated through variations in transaction costs and or netting arrangements etc.

The Australian market is an outlier compared to developed global market standards in that it does not offer a Depository asset-holding model for equities through a true client omnibus structure. Many custodians would benefit from the adoption of a true omnibus model, which would reduce risk and costs. This could be considered as an additional offering.

At the CHESS Sub-Register level, the current cash market HIN structure (name on title) is equivalent to a full individual client segregation model. This offers end Investors the highest form of protection but also carries the highest cost. Members note that the integrated nature of CHESS Sub-register can support efficiencies in settlement, fails protection and diary adjustments. The issuer sub-register (SRN) model allows Investors an alternative form of segregation.

Members are interested in having a greater understanding of the role DLT could play in segregation and protection of client assets, and whether it is envisaged in the CHESS Replacement project.

Account structure business requirements cannot be fully assessed without a strategic roadmap, which is still to be outlined by ASX. Once Members have a sufficiently detailed knowledge of the expected journey, they can then best assess the net benefits of potential changes.

- 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?

It is not clear whether ASX's intended operation of a unique client identifier is a replacement for the Broker Sponsored HIN or Issuer Sponsored SRNs. Nor is it apparent whether the client identifier is intended to identify the underlying beneficial owner (UBO).

Members are concerned that additional unique client identifiers could add complexity and costs especially for foreign investors accessing the market.

Members do not believe that the unique client identifiers would provide the benefits

indicated by ASX in their question. CS Participants are able to identify and consolidate client positions, funding and settlement reporting. This would not enhance CS Participants capabilities and would likely add a material cost and impost.

CS Participants would not wish to see the Australian market progress towards being a full ID market, as this will add cost and complexity to doing business in Australia.

CS participants would expect that there would be a material impact and costs on Intermediaries should a UBO be required to transfer between trading, clearing and settlement transaction cycles.

If this were the expectation, then CS Participants would also need to understand whether this requirement could, in fact, be mandated by ASX considering the impact on Approved Market Operators and Approved Listing Market Operators.

Members recognise that unique client identifiers could benefit Regulator's supervisory capabilities and Tax Authorities (in consideration of tax on capital gains and income for investors) or support common reporting standards where residency was also part of the identifier. Members need to assess whether this is the most cost effective way of meeting these broader needs.

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

Should client identifiers be supported, Members also explored alternative ways to identify clients. Rather than creating new standard identifiers, consideration could be given to allowing HIN numbers to embed an Investor Tax File Number, bank account number or residency status. Benefits may be limited and would not be expected to deliver broad based benefits.

Members note that there are emerging global initiatives towards Legal Entity Identifiers. CS Participants would be concerned to see a domestic solution emerge that differs from global solutions.

If ASX is able to better quantify the potential market wide benefits of this enhancement through CHESS Replacement and support with greater referencing to global trends in client identity management and market wide solutions, then Members would engage in further discussion.

Part C Clearing & Settlement Services

Q1. Settlement is currently batch orientated- what impact do you anticipate if the batch processes were optimised/reduced and how would such a change impact your internal processes?

ASX currently operates a single settlement batch.

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

Members ask ASX to consider the following when looking at the settlement efficiencies and batch capabilities of the new system. Supporting changes here could add the following efficiency and implicit costs savings for CS Participants.

- Compressing the time frames of ASX batch processes and the processing of cash and securities outflows and inflows.
- Additional settlement capability post batch through cost effective RTGS settlement capability.
- Enhanced matching criteria for Free of Payment (FOP) pre-matching and the introduction of beneficiary BIC code as a mandatory matching criteria.

Some CS Participants do not wish to see additional batches added, nor settlement period of choice, as these would add cost and complexity, and be limited by treasury funding cycles.

Members would welcome an understanding of whether DLT can enhance existing operating models when taking into consideration the current batch process as well as an understanding of the role or necessity of digital currency in optimising DLT solutions for Clearing & Settlement.

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 actions information? Would the distribution of corporate action data in standardised messages (Swift 20022) allow you to manage your business more efficiently and effectively? Can you describe how this service would benefit your business?

As the highest strategic priority, our Members have indicated CHESS Replacement must remedy structural and service inefficiencies in the current market structure including the development of corporate actions. Please refer to Members' response to the Original Consultation for the full discussion on corporate actions, including support for the use of ISO 20022.

To summarise, Members critical requirements for an industry solution to corporate actions include:

- adoption of global ISO 20022 messaging standards and protocols;
- full information distribution of all corporate action event types;
- handling of complex corporate actions;
- access and corporate action support for non-ASX Issuers on equivalent terms;
- consideration of the design and interaction with respect to ASX and Issuer Sub-Registers;
- capture investor standing instructions and cater for voluntary election instruction handling including proxy voting; and

• give consideration for cash management and handling for distributions.

Members appreciate this cannot be a full Day 1 delivery requirement and welcome the opportunity to develop a roadmap with committed timelines and accountability arrangements to ensure longer term delivery.

Members encourage and promote the need for ASX to actively collaborate with Industry, including Approved Listing Markets, Issuers and Registries to improve standardisation of corporate action information and instruction handling.

Members note that ASX's reference to being a "Golden Source" could imply a single source. While a single scalable asset servicing solution may be cost effective, there also needs to be appropriate governance arrangements – similar to those laid out in COFR Regulatory Expectations – around access, pricing and input into design and operation of the service.

We note that in the Hong Kong Questionnaire "Golden Source" referred to Hong Kong Exchanges Groups stated aspiration to deliver Industry Utility Services.

Q4. Do you think the acceptance of standardised instruction (e.g. ISO 20022 format) from participants of ASX for voluntary corporate actions such as election, subscriptions 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?

As stated above, instruction handling is included as a high strategic priority for Members provided it covers standing instructions, voluntary elections and participation in proxy voting. The adoption of electronic instruction handling and removal of paper processing is critical. This is seen as a strong opportunity to reduce CS Participants implicit costs and improve services to their clients.

Members believe these services also represent global best practice of traditional centralised securities depositories.

As ASX is not a complete Sub-Register the efficiency of instruction handling, when considered from a market-wide and Investors perspective, needs to be considered. Market structure was raised in the Members response to the Original Consultation.

Corporate actions processing is not dependent on DLT technology, but Members seek further clarity on whether ASX intends to utilise DLT capabilities for asset servicing.

While there is broad support for ISO 20022 amongst Members, this remains a significant net cost with little value for domestic CS Participants. In the response to the Original Consultation, Members highlighted commercial considerations and

adequate transition arrangements be considered.

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

Members welcome opportunities to review primary market facilities to identify opportunities to improve processing that could allow CS Participants to reduce implicit costs.

We note there are services available that can create better efficiency outcomes, but due to high pricing by ASX, these are not utilised for smaller capital raising events. We encourage ASX to review the Temporary Participant Application process and pricing to encourage a greater take up from issuers for DVP capital raisings. We also encourage a review of how Book Build may better support post-trade handling of capital raising, again focussing on the cost-effectiveness of such a solution.

More generally, there are opportunities to eliminate paper processing, reduce timeframes, and improve automation and notification to participants. ASX could further assist industry in migrating towards automated payments handling and removal of cheques as a form of application funding.

Many of these initiatives are not dependent on CHESS Replacement and so we encourage ASX to consider these efficiency improvements as part of the Forward Work Programme for CHESS Replacement.

Part D Risk Management

Q1. What type of Risk Systems do you rely on for calculating your risk exposure? Please refer to individual firm responses.

Q2What 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 API or other forms of interface with internal systems?

Members have indicated that they have already developed necessary risk management capabilities and no further enhancements here are required.

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?

While a low priority, Members feel there is space for reporting improvements from ASX Clearing. Members indicated that current Stress Testing Exposure Limits are not transparent and efforts could be made to improve the understanding of stress exposure calculations and reporting. Further, Intra-day margin calls are not well

supported with calculations and improvement is required. Additional reporting capabilities, including real-time data and risks feeds, could also support potential

predictive AIMS calls.

Members note that these risk management enhancements may not be dependent on CHESS Replacement and therefore we request these items be added to the Forward Work Programme for the Business Committee to prioritise for review. These service improvements would be the minimum standard for world-class clearing facilities.

As a further matter, we note that in July 2015 ASX announced that NASDAQ had been selected to deliver ASX's next generation post-trade risk management solution. Sentinel Risk Manager was to provide a single, real-time risk management system across both ASX clearing houses and all asset classes, including real-time margin calculation and customer risk analytics. The new risk system was to be implemented in five phases and over two years (anticipated to conclude in 2017). Members request an update on ASX's commitment to the Risk Management upgrade and the intended operation alongside the CHESS Replacement project. Again, Members request that ASX provides a clear roadmap to confirm ASX's strategic vision for harmonisation objectives and systems integration for risk management and implications for CHESS replacement, if any.

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

Members would welcome ongoing clarity around necessary legislative and rules changes that would better support orderly default management processes. These include the consideration of the batch settlement and consistency with legislative frameworks and insolvency laws.

Part E Collateral Management

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

CS participants did not have as strong preference for additional collateral noting the predominant use of cash.

In considering potential enhancements for collateral management, ASX could consider harmonisation of collateral and operational procedures across both CCPs. There is also the opportunity to integrate into emerging global collateral management platforms including ASX's own Collateral Management platform. There may be greater requirements should account structures evolve.

Q2. By Introducing a centralised collateral pool to be utilised across multiple clearinghouses, what benefits do you envisage and what impact (operational &

technical) can you identify for cash and non-cash collateral?

Members believe there could be strong benefits from a centralised collateral pool. Members recognise that a precondition for leveraging these benefits could be a harmonisation of account structures so that collateral is centrally lodged against like clearing account types.

Centralised collateral could improve CS Participants collateral requirements and reduce CS implicit costs of capital. We recognise that the benefits of centralised collateral will arise for those firms with the broadest membership across ASX Clearing facilities and that there is likely to be little benefit to equity-only CS participants.

Members would assess this to be a medium priority and not necessarily dependent on CHESS Replacement. Members request that this be considered as part of the Forward Work Programme for the Business Committee.

Part F New Products and Services

The replacement of ASX's CHESS Post Trade infrastructure provides an opportunity to develop and enhance new products and services to the market. The following potential list of services has been identified to date:

- Expanded corporate actions services
- Expanded security encumbrance capabilities
- Settlement period choices (in additional to the default period of T+2)
- Real-time data services
- 2 Global messaging standards ISO 20022
- Access to Australia's New Payments Platform (NPP) for payment services
- Beneficial ownership data to enable enhanced reporting capabilities.

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

Members commend the aspiration of ASX to offer new products and services for CS Participants. We refer ASX to the responses provided in our Original Consultation on these new services.

With the exception of Corporate Action improvements and ISO 20022 new products and services were a lower strategic priority for Members for CHESS Replacement.

Members do wish to understand ASX's expected new product roadmap beyond 2020 and some members continue to raise concerns as to whether ASX intends to offer Investor services, in competition with CS Participants through the changes envisioned in CHESS Replacement and DLT.

Members seek reassurance and again request that ASX affirm in their guiding principles that CHESS Replacement should operate with the highest priority for the

benefit of CS Participants who are ASX's clients and the primary users of CHESS.

To the extent that NPP platform developments may help CS Participants real-time client cash handling, or reduce costs, Members welcome future opportunities to understand NPP integration for CHESS Replacement.

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

Please refer to Members' recommendations for necessary improvements to asset registration efficiencies in their response to the Original Consultation. Members state that, addressing structural and service inefficiencies in the current market structure, remain a high strategic priority.

Part G Clearing House Consolidation

ASX has two Clearing Houses operating under separate legal entities.

Q1. Where we can pursue a single entity multi-asset Clearing House, which aspect of
consolidation would allow you to achieve greater capital efficiency?
☐ Single clearing house legal entity
☐ Single/ segmented default funds
☐ Multiple default funds
☐ Single risk margining model covering multiple asset classes
☐ Single rule book
☐ Single technology platform across multiple markets
□ Other?
The two ASX CCPs have fundamentally different default fund structures. Members recognise that this is a reflection of history.
CCP consolidation is a strategic opportunity for ASX to drive down capital required to support the CCPs. While Members have indicated harmonisation as a moderately important strategic priority, this priority could be elevated if it could materially reduce ASX explicit costs and in particular ASX Clear equity clearing fees. If CCP consolidation could drive a material reduction in ASX's explicit costs then Members would welcome further discussion and analysis.
CCP consolidation could allow for greater cross-margining offsets and netting reducing some CS Participant's margin requirements. A precondition of cross margining and netting offsets is harmonised account structures and a single CS Participant entity accessing the CCP.
Not all firms would benefit from CCP consolidation with the greatest benefits to those firms with the broadest membership across CS facilities.

Members recognise that Regulatory Standards will drive minimum capital requirements for the CCP and, therefore, Members welcome opportunities to work collaboratively with ASX and the RBA to reduce CCP capital whilst also maintaining a robust capital base. CCP consolidation can have other unintended risks and consequences and careful consideration of dynamic default fund ordering are required to mitigate those risks.

ASX is well positioned to provide quantification and analysis of CCP consolidation outcomes, as well as reference to global markets where changes and structures similar to those proposed have been implemented.

These initiatives are not dependent on CHESS Replacement but may impact CHESS business requirements (e.g. account structures). Members request CCP consolidation be included as part of the Forward Work Programme for the Business Committee.

In the context of this question, Members have given an indicative priority based on an anticipated ability to deliver capital efficiencies sought by CS Participants.

Members are aware that there are costs to considering these changes, and so welcome an application of a net benefits test.

Single clearing house legal entity	High Priority – More likely to be able to provide margin and collateral benefits for CS Participants.
Single/ segmented default	Highest Priority – More likely to be able to provide
funds	capital savings for the CCP and benefits for CS
	Participants. Must be considered in the context of
	dynamically ordered default funds.
Multiple default funds	Not a priority – It is anticipated that separation of
	default funds is likely to increase CCP capital and
	therefore costs to CS Participants.
Single risk margining	Moderate Priority – May support harmonisation of
model covering multiple	risk management and reduce ASX explicit costs.
asset classes	
Single rule book	Moderate Priority – CS Participants expect
	standardisation across CCPs. Changes should support
	reduced compliance costs and flexibility in access
	models.
Single technology	High Priority – Provided this could materially drive
platform across multiple	down CCP and CS Participant costs through single
markets	interfaces.
Other	Other topics to be considered could include:
	Partial mutualisation of Cash Market Margins to

- reduce ASX Capital for Equities.
- Advances in participant models for ASX Clear.
- Consideration of wholly remote CCP access for cash equities.
- Advancement of Foreign ADI as CP membership for ASX Clear.
- Consideration of Principal-to-Principal models for ASX Clear.

Q2. a) If we could pursue a single entity multi-asset CCP and refine membership criteria appropriately, will you look to reduce the number of own entities accessing ASX, where you have multiple membership/participant entities?
b) what support would you require from ASX

Members recognise that realising the benefits of consolidating the CCPs is not without its costs to ASX and to CS Participants. Should a CS Participant change membership it is anticipated to have a material impact on internal structures and client relationships.

Given its unique access to market information, ASX can provide CS Participants with an understanding of the simulated impact of these changes. ASX can also provide project management guidance to support and understanding of migration requirements. With this information, all parties will be better placed to determine the appropriate priorities for these changes.

A number of Members have already established appropriate Membership arrangements that optimise and minimise their capital obligations. Further benefits would be limited to possible reductions in margins only.

Members also recognise that moving the Industry to T+1 on a whole of market basis is also an effective measure to reduce CCP and CS Participant capital requirements. Members recommend T+1 remain a future aspiration, in line with global market trends.

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?

CHESS Replacement should support API access to CS participant's own data at little or no cost.

Data ownership has been raised as a concern and members seek further engagement to review this. Any third party authorisation of access to the API and CS Participants data should be with CS Participant's consent and with adequate

commercial compensation.

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

API access could be considered for accessing information for reporting purposes; holder positions, status updates etc.

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

ISO 20022 is appropriate for CS Participants post trade access to market infrastructure.

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

Members remain open and generally supportive of the exploration of alternative technologies for CHESS Replacement.

Members have an ongoing need for greater detail about DLT and its expected application for CHESS Replacement. It is important to understand the operating models assumed by ASX for its implementation as this is relevant, not only for CS Participants, but also for Approved Market Operators and Approved Listing Market Operators.

Users need to understand the impact, implications and opportunities of DLT for their own organisations. Many Members also believe a better understanding of the technology and its capabilities can inform their business requirements.

Users cannot critically assess the case for DLT without a common market wide understanding of the technology.

Many Member firms global and local parent organisations are currently actively engaged in block chain and DLT consortiums and have actively developed and tested blockchain proof of concepts. Despite this, information and knowledge remains within limited and closed groups within the Australian Market.

Therefore, Members believe it is an obligation of ASX, as a market infrastructure provider, to provide the necessary transparency, guidance and education to the market so that the market can give rigorous consideration to DLT implications alongside ASX's own investigation of the technology.

Members note this request for information has been raised in many consultation forums: bilateral engagements, ISO Technical Committees and Consultation Workshops attended by Members and Industry peers. ASX has generally discounted and disregarded Users requests for information and has referred them only to public White Papers published by Digital Assets Holdings (Non Technical White Paper December 2016 and the Global Synchronisation Log November 2016).

Stockbrokers and Financial Advisers Association has formally requested that ASX seek to re-publish The Non Technical White paper with specific reference to the market structures and terms relevant to Australia. In addition, some early indication

on where DLT will operate in the current post trade lifecycle

We refer ASX to Figure 12 in section 3.3 of the Non Technical White Papers, also copied in Annex 2 for convenience. Members request ASX use this model as a way of demonstrating the application of DLT, but with specific reference to the Australian market structure. Members also seek clarity on a number of other matters including an explanation of optional election for the node and how the model contemplates API/FIX or ISO interfaces.

Some Members have also made individual requests both to ASX and direct to Digital Asset Holdings for greater understanding of the assumed operating models.

Members therefore again request that ASX provide greater information and guidance on the assumed operating model an applications being considered by ASX for DLT in the context of CHESS Replacement. Should it be required, this matter can be raised as a formal request in the Business Committee and ASX's response should cover the "If not, why not" test of COFR Regulatory Expectations.

Finally, Members wish to understand ASX's expected new product roadmap beyond 2020 and some Members continue to raise concerns as to whether ASX intends to offer Investor services, in competition with CS Participants through the changes envisioned in CHESS Replacement and Distributed Ledger technology (DLT).

Members request ASX formally addresses the risk mitigation being considered for DLT, noted in our response to the Original Consultation. ASX should confirm if the independent validation of the decision to support DLT for CHESS Replacement would be provided to the Business Committee for endorsement.

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

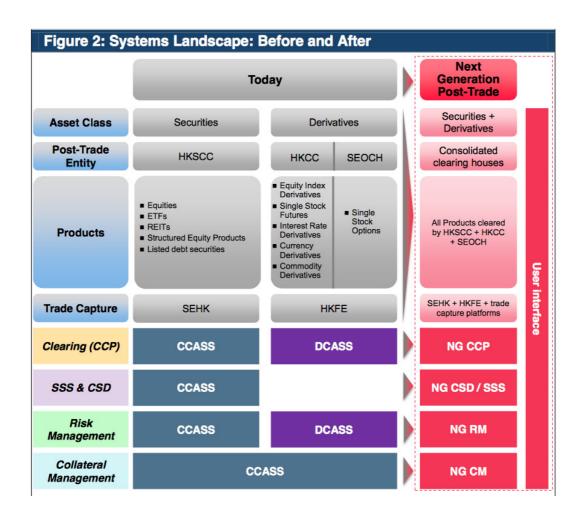
Many Member firms, global and local parent organisations, are currently actively engaged in block chain and DLT consortiums and have actively developed and tested blockchain proof of concepts.

Members would encourage ASX to consider opportunities to engage local members and technical staff in education, detailed demonstrations and broaden the understanding DLT.

Part I-Vendor Systems Management

Please refer to Individual firm responses to these questions.

Annex 1: Figure 3 from Hong Kong Exchange July 2016 request for Information.



Annex 2; Figure 12 from the DAH Non Technical White Paper.

3.3 Trade Flow Example

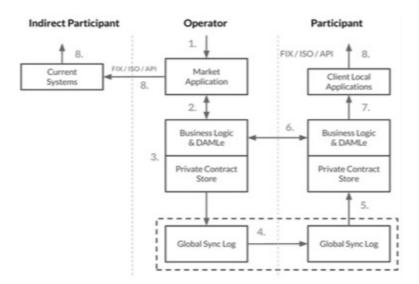


Figure 12. Example showing the flow of data between a Operator, a Network

Participant and an Indirect Participant

The example in Figure 12 shows a post-trade process between an Indirect Participant (operating using existing messaging protocols only) and a Network Participant (operating a full instance of the DA Platform software) through an Operator, in this example an exchange.

- An instructional message is sent to the Market Application from an execution venue.
- A DAML command is sent to the DAML Execution Engine of the Operator.
- The Operator then processes the command, instantiates the relevant contracts, persists them to its Private Contract Store, and inserts a hashed evidence of the transaction onto the Global Synchronization Log.
- 4. This evidence is then broadcast on the GSL to all Network Participants.
- 5. The Participant(s) affected by this event is(are) privately notified.
- 6. The Participant then requests receipt of the relevant contracts from the Operator (or any other party to the trade), verifies that the contracts are correct against the hash in the GSL, executes the contents of the contracts in its DAMLe to validate the contract business logic independently, and persists the contracts to its PCS.
- 7. A DAML Event is sent to the Participant's local Application.
- The Participant is then notified by an ISO or FIX message or through the API. The Indirect Participant is also notified in the same way by the Operator.