

Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Communication of ASX stake in Digital Asset
Reference	Page 20 of Hansard transcript

Question

CHAIR: This engagement of the ASX with Digital Asset is quite significant. Could I just go to December 2017, when you published a media release announcing the selection of the distributed ledger technology by Digital Asset to replace CHESS? Do you feel it was appropriately communicated that the ASX at that time had a stake in Digital Asset?

Ms Lofthouse: I can't comment on that, actually. I don't have the details of what we communicated around our stake in Digital Asset. Perhaps we can take that question on notice.

Answer

On 22 January 2016, ASX issued a media release regarding the selection of Digital Asset to develop solutions for the Australian market using distributed ledger technology (DLT).

The media release also included the following details:

- > ASX has joined 12 other global financial services leaders and made a minority investment in Digital Asset.
- > ASX has paid A\$14.9 million to acquire a 5% equity interest in Digital Asset, fund an initial phase of development, and acquire a warrant that will give ASX the right to purchase further equity and appoint a director to the board.
- The initial 6 to 12 months will be used to develop a solution that demonstrates the benefits that DLT could bring to a broad range of users – including investors, listed companies and intermediaries.
- > The development will take place alongside CHESS, which will continue to operate as normal. This will allow all stakeholders to assess the benefits and implications before a final decision is made on Australia's post-trade technology in 2017.

The media release referred to by the Chair during the hearing, dated 7 December 2017, announced ASX's intention to replace CHESS using DLT developed by Digital Asset. That media release also noted that ASX will exercise its pro-rata right to participate in Digital Asset's recent Series B fundraising and subscribe for US\$3.5 million convertible notes.

Copies of both media releases are attached for reference.



Media Release

22 January 2016

ASX SELECTS DIGITAL ASSET TO DEVELOP DISTRIBUTED LEDGER TECHNOLOGY FOR THE AUSTRALIAN EQUITY MARKET

ASX Limited (ASX) today announced that it has selected US-based firm Digital Asset Holdings, LLC (Digital Asset) to develop solutions for the Australian market utilising Distributed Ledger Technology.

ASX has joined 12 other global financial services leaders and made a minority investment in Digital Asset. ASX has paid A\$14.9 million to acquire a 5% equity interest in Digital Asset, fund an initial phase of development, and acquire a warrant that will give ASX the right to purchase further equity and appoint a director to the board. The warrant is exercisable if certain conditions are met.

In February 2015, ASX announced that it would replace or upgrade all of its main trading and posttrade platforms. Phase 1 of the program runs to the end of 2016 and will replace ASX's existing trading and risk management systems.

Phase 2 focuses on ASX's post-trade services, including clearing and settlement of the cash equities market. The system that currently provides the clearing and settlement services to the Australian equity market is known as CHESS.

ASX will work with Digital Asset to design a new post-trade solution for the Australian equity market.

The initial 6 to 12 months will be used to develop a solution that demonstrates the benefits that Distributed Ledger Technology could bring to a broad range of users – including investors, listed companies and intermediaries.

The development will take place alongside CHESS, which will continue to operate as normal. This will allow all stakeholders to assess the benefits and implications before a final decision is made on Australia's post-trade technology in 2017.

ASX and Digital Asset will engage with regulators and Government agencies to assess the benefits that a new solution could deliver to them, and ensure that any future post-trade solution will meet the high regulatory, operational and security standards that apply to Australia's financial markets.

Distributed Ledger Technology is sometimes referred to as blockchain. The standards that apply to regulated financial markets mean that the design of a solution will differ from the publicly available blockchain. The architecture will be based on a private network whereby all parties that participate will be permissioned to do so – as they are today when they connect to CHESS.



Distributed Ledger Technology may be able to significantly simplify and speed-up post-trade processing. For ASX clients this could remove risk and reduce back-office administration and compliance costs, while investors could experience significantly faster settlement of equity transactions – potentially in near real-time.

Adoption of Distributed Ledger Technology has the potential to stimulate greater innovation by ASX and third parties to develop new services for intermediaries, end-investors and listed companies. This would create a more competitive marketplace across a broad range of services.

Mr Elmer Funke Kupper, ASX Managing Director and CEO, said "There has been very little innovation in the post-trade services that operate around the world for the better part of 20 years.

"Rather than replace CHESS with a new version that is based on the same legacy processes that operate in the market today, we should aim to re-engineer and simplify those processes to deliver significant benefits to the users of the market.

"The initial phase of work is designed to bring the benefits to life and to test if Distributed Ledger Technology can work at the scale of the Australian equity market. By building a solution alongside the existing CHESS system, all stakeholders can participate fully in the innovation process and have confidence in the clearing and settlement processes that underpin one of the top 10 equity markets in the world."

Ms Blythe Masters, CEO of Digital Asset, said: "Digital Asset is delighted to partner with ASX. The work we have done with ASX to date indicates that Australia has a unique opportunity to be a world leader in the adoption of Distributed Ledger Technology. We expect the solution that Digital Asset can deliver will bring significant benefits and exciting new business opportunities to ASX and the Australian market."

Further enquiries:

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Media Release

7 December 2017

ASX selects distributed ledger technology to replace CHESS

ASX today announces its intention to replace CHESS using distributed ledger technology (DLT) developed by its technology partner Digital Asset (DA).

CHESS (Clearing House Electronic Subregister System) is the system used by ASX to record shareholdings and manage the clearing and settlement of equity transactions in Australia. It was world-leading when introduced in the 1990s, providing name-on-register functionality, electronic communications and removing paper share certificates. It continues to be a robust and reliable system. ASX is now taking the opportunity to replace CHESS with a next generation post-trade platform using contemporary technology.

Today's decision follows the successful build of enterprise-grade DLT software for core equity clearing and settlement functions, and the completion of extensive suitability testing by ASX and DA over the past two years. The testing confirms ASX's confidence in the functional, capacity, security and resilience capabilities of DA's application of DLT to meet the needs of Australia's financial marketplace and maintain the highest regulatory and operational standards. The testing included two independent third party security reviews of DA's technology.

The testing was conducted in parallel with a stakeholder consultation program, which included briefing of regulators, to enable ASX to develop a comprehensive understanding of what the market wants in replacing CHESS.

ASX will now work with stakeholders on finalising the scope of Day 1 functionality for the new system, drawing on its extensive consultation that will continue in 2018. Day 1 functionality and the proposed timing for transition are expected to be released for market feedback at the end of March 2018.

The new system will be operated by ASX on a secure private network where participants are known, 'permissioned' to have access, and must comply with ongoing and enforceable obligations.

The system will be designed without access barriers to non-affiliated market operators and clearing and settlement facilities. It will also give ASX's customers choice as to how they use ASX's post-trade services. Customers will be able to connect in a similar way they do today, with the addition of using contemporary global ISO 20022 messaging, or they may interact directly with the distributed ledger. The transition period to the new system will be determined in consultation with stakeholders.

Dominic Stevens, ASX Managing Director and CEO, said: "ASX has been carefully examining distributed ledger technology for almost two-and-a-half years, including the last two years with Digital Asset, in order to understand its potential application. Having completed this work, we believe that using DLT to replace CHESS will enable our customers to develop new services and reduce their costs, and it will put Australia at the forefront of innovation in financial markets. While we have a lot more work still to do, today's announcement is a major milestone on that journey."



Peter Hiom, ASX Deputy CEO, said: "ASX has consulted extensively on the needs and priorities for replacing CHESS, including with customers, share registries, software vendors, other exchanges and industry associations. I am very grateful for their input and support. We've given over 80 DLT system demonstrations to more than 500 attendees, and conducted over 60 CHESS replacement workshops for more than 100 organisations from the global financial services industry.

"ASX has also formed a strong partnership with Digital Asset over the past two years, and we're confident we have chosen the right partner. Together, we look forward to continuing to work with the industry as we finalise the requirements and the roadmap for implementation of the new system."

Blythe Masters, Digital Asset CEO, said: "After so much hype surrounding distributed ledger technology, today's announcement delivers the first meaningful proof that the technology can live up to its potential. Together, DA and our client ASX have shown that the technology not only works, but can meet the requirements of mission critical financial infrastructure."

Coinciding with today's decision, ASX will exercise its pro-rata right to participate in DA's recent Series B fundraising and subscribe for US\$3.5 million convertible notes. ASX and DA have agreed to work exclusively on DLT in Australia and New Zealand. This agreement applies while the Day 1 functionality of the new system is being finalised, and will continue subject to agreement of the full contractual arrangements for the development and support of the new system. These decisions underscore ASX's strong commitment to working with DA to unlock the benefits of DLT.

About ASX

ASX operates at the heart of Australia's financial markets. Our integrated listings, trading, clearing and settlement businesses provide customers with efficient access to and exchange of capital, management of risk, and provision of data and other solutions. We operate across multiple asset classes including equities, fixed income, commodities and energy. ASX is the global leader in A\$ and NZ\$ financial markets, one of the top 10 securities exchanges in the world and the largest interest rate derivatives market in Asia. We have trading and information hubs in many of the world's major financial centres, attract company listings from all around the globe and are based in Australia, which has one of the five largest investable assets pools in the world. ASX operates and invests in the infrastructure that promotes the stability and development of Australia's financial markets. We advocate for regulations that support investors and issuers, promote market integrity and strengthen Australia's global competitiveness. Our vision is to be the world's most respected financial marketplace. More information about ASX can be found at <u>www.asx.com.au</u>

About Digital Asset

Founded in 2014, Digital Asset has over 135 employees in offices in New York, London, Zurich, Budapest, Sydney and Hong Kong, serving global clients like the ASX and DTCC. Since launch, Digital Asset has sought complementary talent and technology by acquiring four companies: Hyperledger, Bits of Proof, Blockstack and Elevence. In 2016, the firm became a founding premier member of the Linux Foundation's open source initiative Hyperledger, to drive the adoption and standardization of Distributed Ledger Technology. <u>www.digitalasset.com</u>

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Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Vendors
Reference	Page 25 of Hansard transcript

Question

CHAIR: Do you want to provide on notice a percentage allocation of how important they were? I ask that because my understanding from previous evidence is that Digital Asset were absolutely fundamental and critical, that they were the premium 'subbie'—I'll use that word because that's what makes sense to me. And we might use 'vendors' and it's much more elevated language, but people understand the concept of a main contractor and a subbie. We get the idea. Somebody is responsible, and there are a few others aligned with them. Was Digital Asset the largest vendor, to use your language, in this project and its delivery?

Mr Curran: That we'd have to take on notice and come back to you, and we'd have to do that at a point in time because obviously that moves through the lifetime of the program, but we can certainly come back with a position on that. Largest in terms of criticality or strategic versus cost is a difficult thing. I know I sound like I'm avoiding your question, Chair, but—

CHAIR: I am interested in cost, but what's essential to us is the criticality-

Mr Curran: In terms of strategic importance of the program, they would be one of the top three, without any doubt.

CHAIR: Who are the other two?

Mr Curran: I would put VMware as one of the other ones up there in terms of the work that needed to be done in that environment, and then you get into more of your technical capabilities below that. I would put VMware and DA as the two, not the three.

Answer

There were six vendors involved in assisting ASX on different aspects of project delivery. The two critical vendors for the core clearing and settlement solution were Digital Asset with respect to the provision of the CHESS application, and VMware with respect to the provision of the distributed ledger.

For completeness, we have included a breakdown of costs associated with the six external vendors who provided a mix of specialist skills, products or services.

Vendor	% Allocation	Description
Digital Asset	64%	Core Application
VMware Australia	6%	Ledger
Industrie IT Pty Ltd	9%	User Interface for application
Dell Australia Pty Limited	10%	Hardware
KPMG	9%	Data migration tool & Security
EY	2%	Assurance
	100%	



Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Timeline on testing
Reference	Page 27 of Hansard transcript

Question

CHAIR: Can I ask you for a timeline indicating when you received products from Digital Asset which asked for testing and the response times in which the testing that was requested occurred, because it seems to me that was a critical break point in the progress of the project, based on the evidence we've received. I'll ask you to do that on notice.

Answer

Between 2019 and 2022, ASX received progressive code releases of functionality provided by Digital Asset. Over this period, ASX received 1826 customer-facing features (known as 'stories') from Digital Asset.

The ASX project team release management approach for new scope and code was that, once tested internally by ASX, it would then be released into the customer development and testing environments. The cadence of turnaround from Digital Asset code being shipped, to ASX testing being complete (for customer-facing features), was on average 2 to 3 'sprints' (or 4-6 weeks) depending on the complexity of the functionality. If testing of a feature was running behind, ASX would prioritise the testing 'stories' within a feature, based on criticality of the feature for customers. Any defects identified during ASX testing would be reported to Digital Asset in a timely manner.



Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Timeline of EY involvement
Reference	Page 28 of Hansard transcript

Question

CHAIR: I want to go to the relationship with Ernst & Young, now commonly called EY. The consulting, audit and assurance firm Ernst & Young completes all of the audit and assurance work for the ASX; is that correct?

Ms Lofthouse: They have specifically been doing a series of pieces of assurance work on certain projects and deliverables. EY conducted various pieces of project assurance on the CHESS replacement project.

CHAIR: At what points? We're talking about history here. I want a sense for how long EY have been involved in the project.

Ms Lofthouse: I think they have been involved in the assurance from the outset. But let us get you that date.

CHAIR: So, if we assume 2016-17, EY have been involved-

Ms Lofthouse: The assurance process would probably have started a little later than that.

Mr Roche: We can provide you with the precise time line, but EY have been involved in the project from around 2019. They were reviewing the project management and governance of the CHESS replacement program for circa 2019. But we can provide you those details on notice.

Answer

ASX has engaged EY to undertake a number of separate assurance activities and reviews on the CHESS replacement project over the past five years. The key engagements are outlined in the table at Attachment A.

ASX has also engaged EY to undertake reviews on some other non-CHESS related matters. Key engagements on non-CHESS related matters included assessing ASX's compliance with the Financial Stability Standards published by the RBA and the ASIC Market Integrity Rules.

ASX limits the use of EY for advisory work in order to maintain the independence of EY for the purposes of assurance work relating to regulatory deliverables.



Date	Description
November 2019	Project Health Check
	 Assurance provider – project health check that reviewed CHESS Replacement's project governance arrangements.
September 2020	Program Re-plan Review
	 Assurance provider – review of the project re-plan which resulted in the go-live date moving to April 2023.
May 2021	Project Health Check Review
	> Assurance provider – further project health check of CHESS replacement project.
November 2021	Additional licence conditions
	> ASIC imposed additional licence conditions on ASX, requiring the appointment of independent experts to report on the appropriateness of ASX's actions to address the recommendations from the ASX trade outage independent review, and to report on the CHESS Replacement project assurance program. EY was appointed as the independent expert for both purposes, following consideration of another potential provider and after consulting with ASIC and the RBA.
	> EY has continued to review and provide reports under the licence conditions to ASX and ASIC, which ASX has published.
December 2021	External review of CHESS Replacement cutover approach and data migration strategy
	Perform a high level review of the cutover approach and data migration strategy for the CHESS replacement project, ahead of engagement with industry stakeholders on the data migration strategy.
February 2022	Additional Licence Conditions
	 Design assessment of the CHESS Replacement Assurance Program to determine whether it was fit for purpose.
June 2022	Additional Licence Conditions – 6 monthly progress report
	The matters covered in the review included an update on February 2022 report issued, an assessment of completed assurance reviews and closed review findings in the 6 month period, and an assessment of the completed recommendations from the ASX trade outage independent review.
August 2022	External review of statement of work for external review of the CHESS replacement application
	> EY reviewed of the Statement of Work for Accenture's external review of the CHESS replacement application. This was requested by ASIC.
December 2022	Additional Licence Conditions – 6 monthly progress report
	The matters covered in the review include an update on June 2022 report issued, a review of assurance scope for the CHESS Application Delivery Review and the Replan Review, an assessment of completed assurance reviews and closed review findings in the 6 month period, and an assessment of completed recommendations from the ASX trade outage independent review.

Attachment A - ASX engagement of EY during the CHESS replacement project



December 2022	Special reports
February 2023	> ASIC requested that ASX prepare three special reports on: ASX's arrangements for current CHESS; ASX's plan to address the recommendations of the external review into aspects of the CHESS replacement application delivery; and ASX's project, program and portfolio management frameworks.
	> EY will audit each of the three reports. EY was chosen in consultation with ASIC as the auditor.
Feb 2023 – October	Review of Define and Plan stage
2023	> The purpose of the review is to assess whether an appropriate and robust process was performed to select a solution and supplier(s) for the delivery of critical market infrastructure.
	> The scope of the review includes (i) review of the deliverability of the current (Define and Plan) stage; (ii) the robustness of the assessment and selection processes to evaluate solution options, to assess and select any product/solution vendor and system integrator; (iii) review of key deliverables in the current stage of the project; (iv) review of project management and governance processes for successful delivery, including the effectiveness of the strategy, plans and processes for engaging with industry stakeholders via the Technical Committee; (v) reviewing the implementation of project specific Accenture actions due in the current stage.
June 2023	Additional Licence Conditions – 6 monthly progress report
	> The matters covered in the review include an update on December 2022 report issued, progress of completed assurance activities and closed review findings in the 6 month period, and an assessment of completed recommendations from the ASX trade outage independent review.



Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Recommendation to DA regarding EY
Reference	Page 29 of Hansard transcript

Question

CHAIR: Did ASX recommend EY to Digital Asset as an assurance provider, given Mr Hiom was on the boards of both entities?

Ms Lofthouse: Not that I'm aware of, but we can find out if we've got any information on that.

Answer

ASX, to the best of its knowledge, did not make a recommendation to Digital Asset regarding EY as an assurance provider.

As noted in ASX's letter to the Committee dated 23 June 2023, ASX sought information from EY regarding its engagement with Digital Asset. EY has since confirmed to ASX that it has not been retained to manage Digital Asset's Australian interests, either now or since 2016.



Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Governance arrangements
Reference	Page 32 of Hansard transcript

Question

Senator SCARR: I have some questions with respect to the enhanced governance arrangements for maintenance of CHESS and its replacement moving forward. There have been some concerns raised in the submissions which we've received. Have you had an opportunity, Ms Lofthouse, to review those?

Ms Lofthouse: We have reviewed the submissions received, yes.

Senator SCARR: I just want to give you an opportunity to respond to some of these concerns. I think you can take on notice to provide a more fulsome response perhaps, which would be useful for this committee, given the concerns that have been raised.

Answer

ASX would like to provide a further explanation on aspects of the CHESS replacement project governance, to respond to concerns raised in submissions to the Parliamentary Joint Committee.

Arrangements for managing conflicts of interest

ASX, as requested by the RBA, has engaged law firm Herbert Smith Freehills (HSF) as an external expert to review ASX's arrangements to identify and manage potential conflicts between the commercial interests of ASX Group and the licence obligations of ASX Clear and ASX Settlement, focusing on current CHESS and CHESS replacement. This review is well progressed and we expect to publish the HSF report in July. ASX has in place a structured and robust framework for the identification and management of conflicts of interest and will work with HSF to implement any further changes recommended by the HSF review.

With the appropriate conflict management arrangements in place, clearing and settlement services can be offered effectively by a vertically integrated exchange group. This structure allows for the efficient use of resources, development and sharing of expertise across the group, and access to financial resources (which is particularly important during times of financial stress). ASX, as a vertically integrated exchange, is not unique amongst global exchanges. Other major markets in which vertically integrated exchanges exist include Singapore, Japan, Germany and Canada.

ASX is also preparing an updated CHESS Governance Statement which will provide a more holistic and consolidated view of all the governance arrangements with regard to CHESS and CHESS replacement. This will be released in July.

Clearing and settlement services are provided to other markets in accordance with the *Regulatory Expectations for Conduct in Operating Cash Equity Clearing and Settlement Services in Australia*¹ developed by the Council of Financial Regulators. The ASX Cash Equities Clearing and Settlement Code of Practice² sets out ASX's commitment to comply with the Regulatory Expectations.

¹ <u>Regulatory Expectations for Conduct in Operating Cash Equity Clearing and Settlement Services in Australia</u>, Council of Financial Regulators, 2017

² ASX Cash Equities Clearing and Settlement Code of Practice, ASX



Chair of the Business Committee and Technical Committee

The Business Committee is chaired by an ASX executive who is able to coordinate input from a range of different stakeholders and industry groups. ASX considers that any potential conflicts in relation to an ASX chair have been managed appropriately. However, we recognise that some submissions, including from Computershare (CPU) and the Governance Institute of Australia (GIA), have suggested the appointment of an independent chair of the Business Committee.

As the current chair of the Business Committee is leaving ASX later this year, ASX has been considering the best approach for a replacement chair. ASX is keen to address any perceived conflict and is actively considering whether an independent chair would assist to improve the effectiveness of the Committee.

In relation to the CHESS Replacement Technical Committee (which is a subcommittee of the Business Committee), stakeholder submissions made the following points:

- > GIA noted that if it is to serve as an industry forum then it is appropriate for the ASX Project Director to chair this body, if however, it is intended to play any sort of governance oversight role then the chair should be independent of ASX management.
- > CPU calls for the chair of the Technical Committee to be independent.

The Technical Committee is an industry forum with a specialised role to obtain expert input and help solve issues in relation to CHESS replacement. ASX considers it is appropriate and beneficial to have a chair who is deeply familiar with the detail of the project. We also note the Technical Committee has observers from the regulatory agencies, industry association and EY as ASX's assurance provider on the project. An independent observer at Technical Committee meetings has also been put in place. Independent moderators (from an industry association) have also been put in place at stakeholder working group sessions being held to obtain input on the scope of the CHESS replacement solution.

Input to the boards of ASX Clear and ASX Settlement

CPU submitted there should be greater emphasis on ensuring that the advice and input of the Business Committee and Technical Committee is acted upon by the boards, and if not, there is a clear basis for not doing so. ASX agrees that it is important for recommendations to be considered by the boards of ASX Clear and ASX Settlement and confirms that this is covered by the existing governance framework.

The Business Committee Charter states that the role of the Committee is to provide input for consideration of the boards on:

- > the ongoing operation of cash equities clearing and settlement infrastructure and services provided by ASX; and
- > setting the ASX investment strategy for cash equities clearing and settlement infrastructure and services development, and the system design, operational arrangements and implementation plan for new cash equities clearing and settlement infrastructure and services provided by ASX.

It is the role of the Business Committee chair to report these matters to the boards. Under the ASX Code of Practice the boards give due consideration to recommendations on a '**comply or explain**' basis and provide a written explanation back to the Business Committee. The boards have regard to the licence obligations of ASX Clear and ASX Settlement in considering how any recommendations are implemented.

There have been a limited number of recommendations to the boards, particularly in recent years, and the appointment of an independent chair may help to encourage members to put forward recommendations for consideration.

Cboe Australia (Cboe) referred to requirements of the European Market Infrastructure Regulation that central counterparties (CCPs) form a risk committee made up of representatives of clearing participants, independent members of the board and representatives of clients to ensure that clearing members and clients are adequately represented in decisions taken by the CCP that have an impact on them. As noted above, the Business Committee provides the opportunity for participants and other stakeholders to provide input to the boards. ASX Clear also has a Risk Consultative Committee to consult with clearing participants on matters which may impact risk management for ASX Clear and participants. This Committee is chaired by a senior employee of a clearing participant member.



Size of the Technical Committee

GIA submitted the membership of the Technical Committee is too large for it to hold two way discussion and debate of the issues. ASX must balance the need to include all interested stakeholders and the size of the committee. ASX has taken the approach of not excluding stakeholders who wish to participate in the Technical Committee. We consider that so far the size of the Committee has not impacted the quality of discussion or debate. However, we will keep this matter under review.

Governance of operating rules process

CPU suggested that a revised governance framework should include greater scrutiny of the ability of ASX Clear and ASX Settlement to amend operating rules.

There is a comprehensive framework in the Corporations Act for amendments to the operating rules of licensed entities³. Proposed rule changes must be submitted to ASIC, and ASIC has the power (delegated by the Minister) to disallow those rule changes. ASIC consults with RBA in relation to any amendments to the rules of clearing and settlement facilities.

ASX consults with stakeholders in advance of providing rule amendments to ASIC (where appropriate), and takes account of any feedback received in that consultation. ASX discusses the rule amendments in detail with ASIC and RBA and provides a supporting analysis and certification confirming that the matters that ASIC (as delegate of the Minister) must have regard to in considering the rule amendments have been addressed. This process will continue to be followed in relation to CHESS replacement.

Alternative governance proposal

We have considered the proposal put forward by CPU for the governance of the CHESS replacement project and clearing and settlement services more generally, and provide our detailed analysis and response at **Attachment A**.

³ Corporations Act, sections 822A to 822E



ATTACHMENT A – ASX VIEWS ON ALTERNATIVE GOVERNANCE PROPOSAL

The alternate governance framework proposed by CPU seeks that ASX Clear Pty Limited (**ASXC**) and ASX Settlement Pty Limited (**ASXS**) outsource their decision making functions to an industry representative body (referred to in the CPU supplementary submission as the Clearing and Settlement Governance Committee (**CSG Committee**)).

CPU provides two options to do so.

- (a) Under **Option 1**, the decision making power of the CSG Committee is a qualified power, such that if ASXC or ASXS disagree with the CSG Committee, the decision making function would be outsourced to a third party independent expert.
- (b) Under **Option 2**, such qualification of the decision making power of the CSG Committee does not apply, although if ASXC or ASXS disagree with the CSG Committee it allows for the regulatory agencies to overrule the CSG Committee's decision on public interest grounds.

Under the CPU supplementary submission, the CSG Committee is appointed by and reports to ASX Limited (**ASXL**), i.e. rather than ASXC and ASXS. This is to occur via a delegation by the ASXL Board.

Set out below is ASX's views regarding the alternate governance framework proposed in CPU's supplementary submission.

The alternate governance framework proposed by CPU does not represent an appropriate governance structure for the function of clearing and settlement facilities (CS facilities)

The alternate governance framework proposed by CPU seeks that ASXC and ASXS outsource their decision making functions to the CSG Committee, or to a third party independent expert in the case of Option 1 where ASXC or ASXS do not agree with the CSG Committee. For the reasons set below, this does not represent an appropriate governance structure for the function of the CS facilities operated by ASXC and ASXS.

Inconsistent with the legal framework for CS facilities

The obligations of ASXC and ASXS as licensed CS facilities attach to those corporate entities.

CS facilities are required to be licensed under, and are subject to the obligations set out in, the Corporations Act. This includes, to the extent that it is reasonably practicable to do so:

- (a) To comply with the financial stability standards (FSS) determined by the RBA (s821A(1)(aa)(i)).
- (b) Do all other things to reduce systemic risk (s821A(1)(aa)(ii)).

The financial stability standards determined by the RBA are for the purposes of ensuring that CS facility licensees conduct their affairs in a way that causes or promotes overall stability in the Australian financial system, with the obligations to comply with these standards applying to those CS facilities (s827D of the Corporations Act).

Under the CPU alternate governance framework, while ASXC and ASXS would retain their accountability for compliance with their licence obligations, they would cease to have the responsibility (including the means) to ensure compliance with those obligations.

Instead, ASXC and ASXS would outsource responsibility for that compliance to the CSG Committee or third party independent expert.

Decision making functions and responsibility for compliance with obligations of a CS facility needs to be retained by the entity (and its board) which performs that role and has such obligations, i.e. by ASXC, ASXS and their respective boards.

The FSS determined by the RBA for Central Counterparties (**CCPs**) and Securities Settlement Facilities (**SSFs**) do not contemplate an outsourcing by ASXC or ASXS of their functions to an industry representative body or a third party independent expert. Instead they expect that:

(a) the governance arrangements for ASXC and ASXS (as a CCP and a SSF respectively) provide clear and direct lines of responsibility and accountability, particularly between management and the board (Sub-standard 2.2 and related RBA guidance).



(b) the roles and responsibilities for management should be clearly specified with clear and direct reporting lines between management and board in order to promote accountability, with an expectation that management is responsible for the CCPs and SSFs activities, under board direction (Sub-standard 2.5 and related RBA guidance).

Under the CPU alternate governance framework, the function of ASXC and ASXS management would however be limited to implementing CSG Committee (or third party independent expert) decisions, apart from their one vote at the CSG Committee.

While RBA guidance contemplates involvement of stakeholders in the decision making process (referred to further below), this is in the context of user input to governance, not the abdication of ASXC and ASXS Boards and management from the decision making process.

Inconsistent with the legal duties applicable to directors and officers of a company

Under the Corporations Act and general law, directors and officers are subject to strict legal duties to act appropriately in managing a company's affairs - reflecting their important responsibility for the management and control of a company. These duties include to exercise their powers and discharge their duties:

- (a) with the degree of care and diligence that a reasonable person would exercise in like circumstances (s180);
- (b) in good faith and in best interests of the corporation and for a proper purpose (s181); and
- (c) to not improperly use their position to advantage themselves or someone else, or to cause detriment to the company (s182).

Under the CPU alternate governance framework, while these legal duties are retained by ASXC and ASXS directors and officers, they cease to have effective responsibility for the management and control of the company's affairs and are not in a position to ensure such duties are met.

A considered legal analysis would be required as to whether a broad delegation to the CSG Committee of their decision making functions in respect of the CHESS replacement project and clearing and settlement services, would of itself be a breach of such duties.

A considered legal analysis would also need to assess whether the members of the CSG Committee would as a matter of law, given the CSG Committee's broad decision making function, be viewed to be officers of ASXC and ASXS and therefore be subject to such duties.

Given the effective management and control of the affairs of ASXC and ASXS by the CSG Committee under CPU's alternate governance framework, such an outcome would appear to be appropriate for governance purposes.

The CPU supplementary submission however seeks that the liability of members of the CSG Committee be "carefully defined and limited" and for ASXL to "provide appropriate indemnities to, the members of the CSG Committee (and the organisations they represent)" (paragraph 3.1). It is not clear why that should be the case, and why those CSG Committee members who would effectively control the clearing and settlement functions of ASXC and ASXS, should not be subject to the above duties.

The CPU proposal would be problematic to implement in practice

The CPU alternate governance framework proposed will be difficult to make workable in practice, unless a governance framework was established by the relevant Board and/or CSG Committee which preserved or delegated certain decision making functions to ASXC and ASXS management.

The CPU supplementary submission calls for the delegation of "*decision-making powers in respect of all matters dealing with ASX Clearing and Settlement to the CSG Committee*" (3.1 – Option 2). This could lead to paralysis in operating the CS facilities without the normal delegation by company boards to management of decision making powers (including but not limited to the day to day operation of the entity).

ASXC and ASXS need to make various decisions on a day to day basis and also need to manage issues that may arise in the operation of a CS facility in a timely manner. For example:

(a) All operating rule decisions, including:



- i. participant admissions and issuer, financial product and market operator approvals
- ii. compliance and enforcement decisions
- iii. risk management decisions
- iv. determination and management of default scenarios.
- (b) All decisions as to the management of operational issues.

The CHESS replacement project will also involve decisions at various levels of the design and implementation of the new system, including business requirements and solution design for the new system as well as the rule amendments, to support the operation of the system and reflect the solution design for new or changed functionality.

It is unclear how each of these decisions would be practically outsourced to the CSG Committee.

The proposal does not reflect the separate function and legal obligations of ASXC and ASXS as CS facility licensees and would undermine conflict management arrangements

The proposal by CPU that the CSG Committee is a construct of ASXL does not reflect the separate function and legal obligations of ASXC and ASXS as CS facility licensees. They would undermine the arrangements ASXC and ASXS have in place to manage conflicts which arise as a result of being a subsidiary of ASXL and create the potential for conflict given ASXL's role as a market operator in competition with other AMOs.

As CS facilities, ASXC and ASXS are subject to various obligations, including under the Corporations Act to:

- (a) Do all things necessary to ensure that the facility's services are provided in a fair and effective way (to the extent it is reasonably practicable to do so) (s821A(1)(a)).
- (b) Have adequate arrangements to handle conflicts between commercial interests of the licensee and the need to provide services in a fair and effective way (s821A(1)(c)(i)).

ASIC guidance for CS facilities also contemplates that a CS facility has arrangements in place to anticipate when conflicts may arise and handle them properly including decisions relating to:

- (a) Commercial interests and supervisory or regulatory issues.
- (b) A related party within the same group, such as a market operator for whose participants the CS facility provides services.
- (c) Providing the CS facility's services in respect of transactions on a financial market that is competing with the financial market operated by a related entity (RG 211 at paragraph 211.183).

The FSS developed by the RBA also contain requirements for:

- (a) Board policies and procedures to identify, address and manage conflicts of interest.
- (b) Demonstrating that governance arrangements do not compromise or subordinate the CS facility's interests to the interests of the corporate group.
- (c) Ensuring that decisions cannot be compromised by the group structure or board members being members of another group company (sub-standards 2.3 and 2.9 and related RBA guidance).

In line with their obligations as indicated above, ASXC and ASXS have arrangements in place to manage any conflicts which arise as a result of being subsidiaries of ASXL (a market operator).

ASXCS and ASXS also actively consider enhancements to these arrangements as part of wider enhancements of governance arrangements.

A comprehensive list of the enhancements to ASX governance (both in response to regulatory recommendations and on ASX's initiative) that have been applied since March 2021 is contained in the document titled Key Enhancements to ASX Governance Arrangements tabled by ASX for the Committee on 8 June 2023. They include a requirement that the Boards of ASX Clear and ASX Settlement must be chaired by a non-ASX director (CS Boards must also have at least 50% non-ASX directors).



The proposal by CPU that the CSG Committee is a construct of ASXL undermines ASX's conflict handling arrangements. Any committee providing advice on clearing and settlement matters should report to ASXC and ASXS. These are the entities providing the clearing and settlement services and with licence obligations under the Corporations Act. Providing advice to ASXL which then directs ASXC and ASXS does not address conflicts of interest, but increases the risk of potential conflicts given ASXL's role as a market operator in competition with other market operators.

Comments on specific criticisms of current governance arrangements

1. 'Level of stakeholder involvement' - paragraph 2.7(a)

CPU's supplementary submission seeks stakeholder involvement at the "parent" (i.e. ASXL) board level and states that this is required to address "fundamental concerns with respect to competition in the provision of clearing and settlement services". CPU's supplementary submission does not however provide evidence of their fundamental concerns.

As indicated above, we consider that the most effective way to address any concerns about competition is for stakeholder input to be at the level of the CS facility entities. These are the entities providing the clearing and settlement services and with the related licence obligations.

ASXL is a market operator and there are arrangements in place to manage any conflicts which arise as a result of this. Involving stakeholders at the ASXL level would cut across these conflict management arrangements.

2. 'Limited powers of the committees' - paragraph 2.7(b)

CPU indicates that there needs to be greater emphasis placed on ensuring that advice and input from stakeholders (including via the Business Committee and Technical Committee) is acted upon or, if not, there is a clear basis for not doing so.

CPU does not however provide evidence of the ASXC & ASXS boards or executive management not acting on, or otherwise not explaining to the Business Committee and Technical Committee why it is not acting on, Business Committee and Technical Committee recommendations.

a. Existing obligations for user input to governance

ASXC and ASXS are presently subject to obligations under the FSS determined by the RBA for CCPs and SSFs to have governance arrangements that:

- (a) are clear and transparent and support the objectives of relevant stakeholders;
- (b) ensure that the CCP's or SSF's design, rules, overall strategy and major decisions reflect appropriately the legitimate interests of its direct and indirect participants and other relevant stakeholder; and
- (c) provide for consultation and stakeholder engagement through appropriate forums on operational arrangements, risk controls and default management rules (Standard 2 and Sub-standard 2.8).

The RBA's guidance in respect of such obligations contemplate the mechanisms for involving stakeholders in decisionmaking processes may include stakeholder representation on the board, user committees and public consultation processes (paragraph 2.8.1).

User input to governance is also addressed in the Regulatory Expectations for the Conduct of Cash Equity Clearing and Settlement Services in Australia released by the Council of Financial Regulators (**Regulatory Expectations**), including that ASX should maintain accountability arrangements that provide for regular public attestations as to the effectiveness of its interactions with users, and provides as examples of what would be appropriate in this regard:

- (a) ASXC's and ASXS' user governance arrangements operate on a 'comply or explain' basis; that is, the relevant Board would take actions in accordance with recommendations from the user governance mechanisms, or else explain why such actions had not been taken.
- (b) ASX report, on at least an annual basis, the service developments and investment projects that it has progressed and how it has taken into consideration the views of users (paragraph 1(d)).



b. Function performed by Business Committee for user input to governance

The Business Committee operated by ASXC and ASXS is a standing forum for stakeholder consultation in the context of FSS Standard 2 and Sub-standard 2.8 and the Regulatory Expectations.

The Technical Committee was recently appointed by the Business Committee to assist it in the performance of its role in connection with the CHESS replacement project.

Below is extract describing the function of the Business Committee from the last RBA FSS Assessment of ASXS which provided a detailed assessment against each of its FSS obligations (2018/19), with a similar (but not identical) description applying for ASXC:

"Under ASX's Code of Practice for Clearing and Settlement of Cash Equities in Australia (the Code of Practice), ASX established the Business Committee, a stakeholder advisory body for ASX's cash market clearing and settlement services. The Business Committee comprises representatives of clearing participants, settlement participants, AMOs, issuer registries and industry associations representing relevant stakeholders. The key objective of the Business Committee is to provide user input to the boards of ASX Clear and ASX Settlement on the design, operation and development of the clearing and settlement services and infrastructure for the Australian cash equity market, and provide a formal mechanism for ASX Clear and ASX Settlement to consult users on their strategic plans and investment decisions in relation to these services. The Business Committee's proposals and recommendations are presented to the ASX Clear and ASX Settlement boards for consideration. Although the boards are not obliged to accept the committee's advice, they are required to provide reasons for any decision not to do so. Where it considers it appropriate, the Business Committee can appoint a Technical Committee to assist with the performance of its duties. For example, in December 2016 ASX formed a Technical Committee to consider matters related to CHESS messaging and the adoption of the International Organization for Standardization (ISO) 20022 messaging standard. During the assessment period, the Business Committee discussed a range of initiatives, including the CHESS Replacement project, the performance of ASX's cash market clearing and settlement service, ASX's technology governance and operational risk management, and regulatory matters."

The function of the Business Committee is set out in the ASX Code of Practice which provides that:

"ASX will maintain an advisory Business Committee consisting of representatives of financial market intermediaries and their industry associations, and other listing and trading markets, which connect to or use ASX's cash equities clearing and settlement infrastructure

ASX will hold quarterly Business Committee meetings for the purpose of providing input to Management and the Boards of ASX Clear and ASX Settlement on the ongoing operation and development of cash equities clearing and settlement infrastructure and services

The Boards of ASX Clear and ASX Settlement will give due consideration to any material matters raised by, or recommendations of, the Business Committee. The Boards of ASX Clear and ASX Settlement will receive recommendations of the Business Committee on a 'comply or explain' basis. If the Boards do not accept a recommendation, they will jointly provide a written explanation to the Business Committee".

c. Prior examples of stakeholder input to governance

Where Business Committee members make recommendations, these are dealt with as set out in the ASX Code of Practice. For example:

- (a) At the <u>March 2017</u> meeting, the Business Committee Chair determined that there was a broad consensus that the resolutions on proposed changes to the Business Committee Charter and Code of Practice, as tabled, be submitted to the Boards [ASX Clear and ASX Settlement] as recommendations of the Business Committee. The response in writing from the Boards of ASX Clear and ASX Settlement was included in the papers for the subsequent <u>May 2017</u> meeting, including an explanation of the response to each recommendation.
- (b) At the <u>August 2017</u> meeting, the Business Committee requested ASX management present to the Boards a recommendation that representatives of approved market operators (AMOs) be invited to future CHESS replacement working groups. The response in writing from the Boards of ASX Clear and ASX Settlement was included in the papers for the subsequent <u>October</u> 2017 meeting, and the recommendation was accepted by the Boards of ASX Clear and ASX Settlement.



While there have been no recommendations of the Business Committee since 2017, there have been various action items for ASX coming out of the Business Committee which are followed up and closed. These are referenced in detailed minutes published on the <u>ASX website</u> for each Business Committee meeting.

d. ASXC and ASXS accountability for user input to governance

ASX reports annually to the Business Committee on the cash equities clearing and settlement service developments and investment projects progressed, and how it has taken into consideration the views of users.

An independent annual review of ASX's governance arrangements benchmarked against the Regulatory Expectations is also commissioned annually by ASX, with:

- (a) the draft terms of reference for the annual independent review being submitted to the Business Committee; and
- (b) the report prepared by the reviewer being provided to the Business Committee and the regulatory agencies (ACCC, ASIC, RBA and Treasury).

3. 'Representation on the committees' - paragraph 2.7(c)

CPU's submission calls for "greater clarity in relation to which stakeholder groups are represented on the committees".

The respective Business Committee and Technical Committee charters set out the range of membership of those committees. Relevantly:

- (a) The charter of the Business Committee states that 'The Business Committee will comprise representatives of clearing participants, settlement participants, alternative market operators, other relevant stakeholders and their associated industry organisations.'
- (b) Section 3 of the charter of the Technical Committee provides that:
 - i. Members will include one nominated representative per Business Committee member (other than Business Committee members representing industry associations) and third party software vendors.
 - ii. Industry association members of the Business Committee, ASIC and RBA attend as observers.

The members of the Business Committee are listed on the ASX website.

The minutes of each meeting (provided on the ASX website for the <u>Business Committee</u> and for the <u>Technical</u> <u>Committee</u>) also record the individual attendees and the organisation they represent.

4. 'Procedures with respect to the operation of the committees' – paragraph 2.7(e)

CPU's supplementary submission includes a statement that "Our understanding from stakeholders represented on the Technical Committee is that the committees operate in a way which is not conducive to substantive input and debate".

While ASXC and ASXS acknowledge that the example provided by CPU regarding late provision of meeting material has also been raised in stakeholder feedback received from Technical Committee members (as referred to further below), ASX does not consider CPU's statement as to the operation of meetings to be representative of broader stakeholder feedback from members.

ASXC and ASXS sought feedback from Technical Committee members - through a short 'pulse' survey conducted following the 8 March 2023 meeting of the Technical Committee, on the operation of the committee. The survey had a strong response rate, with reasonably supportive comments. This includes:

- (a) 60% of respondents strongly or somewhat agreeing that the Technical Committee meetings are effective and met their expectations, with 25% neither agreeing or disagreeing and 15% strongly or somewhat disagreeing.
- (b) 95% of respondents strongly or somewhat agreeing that opportunity is given to contribute to the conversation at the Technical Committee with only 5% disagreeing.
- (c) 95% of respondents considering the information shared in the Technical Committee to be very or somewhat useful to their organization.



(d) Feedback received from respondents requesting earlier distribution of meeting materials.⁴

As a direct result of member feedback from the first Technical Committee, an independent meeting observer is also now nominated before each Technical Committee to play back at the conclusion of the meeting what worked well and what required improvement. A summary of their feedback is included in the minutes for the Technical Committee published on the <u>ASX website page</u> established for the Technical Committee.

- (a) One output of that feedback related to the request for material to be distributed earlier for review before and after each Committee. This feedback has been addressed by establishing more regular cadence for the provision of meeting materials, including:
- (b) Meeting agendas are circulated two weeks prior to the Committee date.
- (c) Pre-reading (where required) and presentation material is circulated at least 48 hours prior to the Committee date.
- (d) Draft minutes are shared two weeks after each Committee concludes.

There is also now a standing agenda item at the commencement of each Technical Committee allowing for ASXC and ASXS to address any feedback raised by the independent observer at the previous meeting, or from a Technical Committee member at the previous meeting or that is received through the CHESS Replacement mailbox.

In line with feedback received from Business Committee members when establishing the Technical Committee, ASXC and ASXS will ask members for their feedback on the structure, membership, frequency and material for the Technical Committee at the upcoming Business Committee meeting on 19 July 2023.

As part of its regular engagement activities, ASXC and ASXS also intends to undertake its next 'pulse survey' of Technical Committee members following the 26 July meeting of the Technical Committee.

⁴ While ASXC and ASXS generally aim to distribute materials at least 48 hours in advance of Technical Committee meetings, some material that requires context in the presentation has not been distributed prior to the meeting. For one of the Technical Committee meetings, information shared an hour prior to the meeting was to ensure virtual attendees had the materials that were to be presented in the meeting.



Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Net broker obligation
Reference	Page 37 of Hansard transcript

Question

CHAIR: Mr Curran, can you respond on notice, in light of your comment, to the statement on page 7 of Digital Asset's [submission], which states that delays in getting the ASX to respond to accepting Digital Asset's early documented warnings and suggestions around modifications to processes? That's on notice; you'll get that question.

Answer

The statement on page 7 in Digital Asset's submission, which is extracted below at **Attachment A**, was made in relation to ASX's approach to what is referred to as the net broker obligation (NBO) or "netting". ASX would like to note the following timeline and key points in relation to the inclusion and subsequent change to the NBO requirements in the CHESS replacement project:

- November 2017 ASX's scope document for the proof of concept, agreed with by Digital Asset, included ASX's business requirements for NBO, based on an agreed non-functional requirement (NFR) for capacity / throughput of 3 million trades per day.
- September 2018 Following the proof of concept, the NBO requirements were included in the CHESS replacement solution Project Contract entered into with Digital Asset, based on an agreed NFR for capacity / throughput of 10 million trades per day.
- May 2019 Despite having agreed to deliver the CHESS replacement solution in accordance with these requirements under the proof of concept and Project Contract, Digital Asset suggested changing the NBO requirements and associated business rules and netting process. This suggestion came in the context of Digital Asset seeking to simplify the solution design in order to meet contracted delivery timeframes. ASX rejected Digital Asset's request to change the NBO requirements, based on internal conversations in ASX and further analysis of feedback received through the various customer engagement forums associated with the project.
- March 2020 The increase in intra-day trading activity arising from the COVID-19 pandemic indicated a need to increase the NFR for capacity / throughput of 15 million trades per day. This lead to ASX undertaking the significant process of reconsidering the NBO process and requirements for CHESS replacement, culminating in the February 2021 consultation ('CHESS Replacement: Proposed changes to netting and settlement workflow'). It was following this extensive market consultation, and having regard to the increase in actual trade volumes, that ASX determined that it was appropriate to change the netting process (and ASX consequently agreed to change the NBO requirements under the Project Contract). As this illustrates, in meeting our licence obligations, ASX's role is to seek to achieve the best outcomes for the market as a whole, and in doing so we must balance a wide range of different perspectives.



Attachment A – extract of statement on page 7 in Digital Asset's submission

This issue is exemplified by ASX's approach to what it termed the net broker obligation (**NBO**). The NBO is a feature of the legacy CHESS system. As part of overnight processing on each trade date, CHESS informs brokers of the net payment and delivery obligation or entitlement of a clearing participant in a specified security.

The ability to calculate an NBO in a scalable way was included in the proof of concept application created by Digital Asset in 2017 to prove out the capabilities of a DLT-based system. However, ASX subsequently added additional requirements that were intended to ensure that the NBO was delivered in a traditional, non-scalable way.

The ASX NBO requirement was incompatible with any type of modern clearing and settlement system's scale requirements, regardless of underlying technology. As ASX explained to the market in its 18 February 2021 Consultation Paper, titled *CHESS Replacement: Proposed changes to netting and settlement workflow*:

The design of the current netting process is a constraint on system scalability – as the trade count increases, the netting process takes longer, and at significantly higher volume levels would at some point exhaust the time available for overnight processing. In order to provide much greater system scalability and avoid the need for imposing limits on higher levels of trading activity to manage processing windows, it is proposed that the creation of the NBO and associated messaging be discontinued.

However, it took more than three years for ASX to come around to accepting Digital Asset's early documented warnings and suggestions to modify this process. Digital Asset explained to ASX on numerous occasions over the years that incorporating NBO messaging functionality would significantly constrain scalability and create reliability risks at high volumes (as subsequently acknowledged by ASX in its Consultation Paper). However, ASX was unwilling to accept that the original NBO design was not compatible with a modern clearing and settlement system, and ASX and Digital Asset invested a significant amount of time and effort attempting to develop the functionality as dictated by the original requirements. ASX only agreed to update the NBO requirement to account for higher scaling needs after a significant jump in intra-day trading activity in March 2020—to approximately 7.2 million trades per day—which forced ASIC to impose limits



Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Delivery of original CHESS
Reference	Page 35 of Hansard transcript

Question

Ms MASCARENHAS: This will be a quick question. Was the original CHESS project, the 30-year-old legacy project, delivered internally by the ASX or by a third party?

Ms Lofthouse: Unfortunately, it was 29 years ago, and I don't have all the details. I believe it was an internally delivered project, but we'd have to come back and confirm that to you to be definitive.

Answer

CHESS was built in-house, with a third party provider (RJE Systems) engaged to lead the build.



Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Meetings with Digital Asset
Reference	Page 36 of Hansard transcript

Question

CHAIR: Could I ask you on notice to indicate the nature and regularity of meetings between Digital Asset and ASX up to 2019, when, on the testimony of Mr Saraniecki this morning, the biweekly or monthly meetings that had been taking place stopped. They indicated that they continued a risk register and continued to provide that to the ASX. What occurred in 2019 to stop that regular meeting process? I'm genuinely interested in why that would be the case, given their criticality to the delivery of the project.

Answer

It is not the case that there stopped being regular meetings between ASX and Digital Asset in 2019. We confirm that there were regular meetings at various levels of ASX and Digital Asset, which continued throughout the project. This included weekly CEO-to-CEO meetings, technical level meetings, and numerous Executive Steering Group meetings to which Digital Asset was invited.

The primary change in meeting cadence for ASX and DA after 2019 related to the changed requirements for the technical solution, following DA communicating to ASX that they would no longer be the provider of the DLT platform, which lead to the involvement of VMWare. The change in meeting cadence for ASX and DA between 2019 and 2020 related to the evolving complexity of the technical solution.

From 2020 onwards, in line with the addition of VMWare to the solution architecture for DLT platform, a multi-layered governance approach bringing together all vendors and teams into the program was created. This included the Executive Steering Group, a Joint Project Working Group, an Executive Partner Forum and an end-to-end delivery team – all of which included DA and ASX as primary attendees.

These changes significantly increased the number of engagements between DA and ASX from the standalone biweekly and monthly meetings that occurred prior to 2019.



Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	International context – T+1 settlement
Reference	Page 37 of Hansard transcript

Question

CHAIR: Just looking around at distributed ledger technology in other jurisdictions—and clearing and settlement—I see that there are calls for efficiency, reduction in costs and improvement of reliability and service. We know that it's occurring in the US, Switzerland, the UK, Singapore and other markets. What's the ASX planning, and when will you deliver for our local markets to ensure that we keep up with that? You can take that on notice.

Ms Lofthouse: Are you referring specifically to T+1 settlement?

CHAIR: Yes.

Answer

ASX is aware of the international context for clearing and settlement and has had discussions with industry stakeholders about moving to T+1 settlement in Australia. In May, ASX conducted a survey of Business Committee members to understand what a transition could look like as any changes to the settlement cycle requires significant engagement with the industry and a broad consensus with impacted stakeholders.

We note that moving to T+1 is not dependent on the CHESS replacement system being implemented. ASX's understanding of the need for significant engagement with industry stakeholders on the changes to the settlement cycle, and the associated readiness activities, is informed by the work that was undertaken when the Australian equities market moved from a T+3 to T+2 settlement cycle, implemented in March 2016. In the lead up to implementation of T+2, ASX undertook two formal consultation processes and facilitated a number of industry roundtable discussions.

ASX has been proactive in seeking information globally on this topic and participated in other market industry information sessions. Presentations by ASX on this topic at the ASX Business Committee have been given since December 2021. To date, there have been mixed views from members regarding the desirability of taking this forward in the Australian market at this time.



Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Fee reductions
Reference	Page 37 of Hansard transcript

Question

CHAIR: On fees, we know that fee reduction is occurring in other jurisdictions for C&S services, including in the USA, Canada, Hong Kong, the UK, the EU and New Zealand. Will the new CHESS CS offer from the ASX deliver similar savings to market participants? How critical is that in your decision-making as well?

Answer

ASX is committed to setting fees in connection with the CHESS replacement system in accordance with the Council of Financial Regulators' Regulatory Expectations. This includes maintaining an appropriate method for determining the prices of its cash equities clearing and settlement services so as to generate expected revenue that reflects the efficient costs of providing those services and a return on investment commensurate with the commercial risks involved.

ASX is also committed to transparent, non-discriminatory, and fair and reasonable pricing of its cash equities clearing and settlement services.

The ACCC is expected to complete a pricing assessment of cash equities clearing and settlement services in connection with the CHESS replacement system prior to the go-live.

ASX notes that the costs incurred on the CHESS replacement project up until November 2022 have been derecognised by ASX Limited and will not form part of the cost base for the completed solution when finalised.



Inquiry	Parliamentary Joint Committee on Corporations and Financial Services - Oversight of ASIC, the Takeovers Panel and the Corporations Legislation
Hearing Date	8 June 2023
Торіс	Partnership Program
Reference	Page 37 of Hansard transcript

Question

CHAIR: I would like to also put this on notice: could you provide on notice what the estimated cost to stakeholders was in the course of this project up until the moment when you paused, and could you provide the rationale for the delivery of the \$70 million initiative called the CHESS Replacement Partnership Program? I note that in your opening statement you indicated that initial payment from the development incentive pool has been raised from \$10 million to \$20 million. Could you give us a much clearer outline of the rationale and the process of decision making around that, why the changes were made and where that is up to in terms of the spend? Also, some stakeholder feedback would be of interest.

Answer

Rationale and structure of the Partnership Program

The Partnership Program is an ASX initiative to provide stakeholders with financial contribution towards future participation in the CHESS replacement project, recognising that industry cooperation on the project will be longer than originally anticipated.

The Partnership Program has two key components:

- > **Participant Rebate Pool:** This component will provide rebates to clearing and settlement participants based on their clearing and settlement fees paid to ASX, from a total pool of \$15 million.
- Development Incentive Pool: This component provides incentives to stakeholders building to the platform, and represents a total pool of up to \$55 million. In May 2023 ASX commenced paying the initial financial support pool of up to \$20 million to stakeholders. Future development incentive payments will be based on, and potentially align with, key project milestones.

Accordingly, the total Partnership Program payment amounts are based on some known inputs (e.g. participants' clearing and settlement fees) and future development considerations (e.g. part of the development incentive facility component is tied to work that is currently underway, such as work on the solution design).

To settle on an appropriate structure and figure for the Partnership Program, ASX took into account information shared by a number of stakeholders on CHESS replacement following the announcement to pause the project in November 2022. That information informed ASX's assessment of the likely future development requirements of stakeholders building to the new CHESS replacement system, noting that the intent of the Partnership Program is to encourage ongoing cooperation in the progress and implementation of CHESS replacement.

Development Incentive Pool - stakeholder feedback and increase in the initial payment

On 28 April 2023, ASX invited feedback from stakeholders on the proposed Development Incentive Pool eligibility criteria.

The request for feedback was sent to 77 stakeholders directly impacted by CHESS replacement, being software providers and CHESS users. ASX analysed the 16 responses received and identified key questions and clarifications sought in order to provide a response.



On 17 May 2023, ASX held an industry webinar to take CHESS users and other stakeholders through the consultation process feedback received and ASX's response. A copy of the webinar materials is attached for reference.

Based on the feedback received through the feedback process, as well as feedback received through other stakeholder discussions, ASX:

- > confirmed that it would expand the eligibility criteria to include stakeholders undertaking major internal development work to prepare their systems and operations for CHESS go-live, i.e., clearing and settlement participants developing in-house; and
- > adjusted the criteria, so that it takes into account whether an entity is developing multiple applications that will connect to and interact with the CHESS replacement solution.

As a result, ASX also revised the proposed initial payment size from the Development Incentive Pool, increasing it from \$10 million to up to \$20 million. ASX's media release announcing these changes is attached for reference.

Status of payments under the Partnership Program

The Rebate Pool component of the Partnership Program provides rebates to clearing and settlement participants for their clearing and settlement fees for the period 1 January 2023 to 30 June 2023. The payment of rebates totalling \$15 million will be made in August 2023. The rebates will be distributed proportionately based on each participant's clearing and settlement fees paid to ASX.

The Development Incentive Pool component of the Partnership Program includes eligible software providers, share registries, and parties undertaking major internal development (as outlined above).

Up to \$55 million will be available under the Development Incentive Pool. ASX commenced making initial payments on 31 May 2023 and ASX will pay the initial amounts comprising up to \$20 million in aggregate to eligible stakeholders following their acceptance of the invitation to participate in the Partnership Program. Some stakeholders have requested an extension of time to consider the Partnership Program terms in greater detail and seek clarifications where required. ASX has agreed to provide extensions and make the initial payment when each eligible stakeholder is comfortable with the terms and has signed the Invitation Letter. As at 22 June 2023, payments have been made to 16 of the eligible 23 participants.

ASX will determine milestones for additional financial support payments to be made under the Development Incentive Pool, following the completion of the CHESS replacement solution redesign and the subsequent market consultation on the implementation plan. The additional financial support payments will be based on, and potentially align with, certain critical path project milestones relevant to the CHESS replacement project.

ASX intends to inform Program Participants of the milestones for the additional financial support payments as soon as reasonably practicable after the publication of a revised CHESS replacement project plan. ASX confirmed in the Letter of Invitation and accompanying terms for the Partnership Program that it will seek input from eligible Program Participants and take into account any submissions or representations made by those Program Participants in determining the additional payment milestones under the Development Incentive Pool, once the project timeline has been set. ASX expects this to occur in 2024.

CHESS Replacement Project

Industry webinar

17 May 2023



ASX acknowledges the Traditional Owners of Country throughout Australia. We pay our respects to Elders past and present.

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Housekeeping: trouble shooting

- Check your system requirements
- Audio options:
 - 1. Use your computer's mic and speakers ("Computer audio"). Check that your computer's audio is unmuted
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Housekeeping: how to submit questions



Your Participation To submit your text questions and comments use the Questions panel Note that your questions will not be seen by other attendees For more information - refer to the webinar tips published on the ASX webpage



Presenters and introductions

- Katie McDermott
- Tim Whiteley
- Tim Hogben







- CHESS Replacement program status
- CHESS Replacement Partnership Program
- Q&A

6



CHESS Replacement project status


CHESS Replacement - Solution Update

Planning our thinking around the following key "Solution Types"

Build custom solution Product based solution legacy CHESS

A solution that relies on a

vendor product with

additional ASX components if

required

A solution starts from legacy CHESS codebase and iterates to achieve new capabilities in a phased manner

A solution designed from ground-up with conventional technologies and aligned with principles and IT strategy

A solution based on the current implementation and targeting to solve core issues and complexity leveraging DAML as transaction processing

Fix CHESS

Replacement



Redesign Plan Update Plan for Solution Design

	CY Q1	CY Q2	CY Q3 / Q4	
Product Definition & Business Case	 ✓ Business Vision & Strategy ✓ Program Objectives 	Scope and business requirements refined	 Scope and business requirements baselined Business case submitted 	
Solution Assessment	 ✓ Current state evaluation ✓ Solution decision framework developed 	 ✓ Solution decision framework approved ✓ Solution options refinement ❑ Solution options evaluated 	 Solution design finalised Project estimation completed 	Announcement of solution design
Sourcing & Commercial	✓ Market Scan✓ Vendor solution RFI	 Vendor RFI evaluation Vendor RFP issued and responses received System integrator RFP 	 Vendor commercial and contracting processes SI selection and contracting 	Market engagement on
Testing & Implementation	 Implementation options review 	 Implementation impact assessment High level test strategy 	 Implementation strategy Test strategy & approach completed 	readiness and implementation planning
	y Risk : /endor commercial and contracting	processes may impact the timeline fo	or a Q4 announcement on a solution desigr	1



Project scope Engagement plan for scope refinement sessions

Overview of Upcoming Scope Refinement Sessions:

- Scope refinement sessions will be 4 hour collaborative sessions, held at ASX's offices at Bridge Street and virtually via Teams.
- In each session the aim will be to construct a number of business canvases (refer sample) that articulate the problem statements and proposed solutions for each scope request as well as benefits, risks and impacts.
- Invitees will be surveyed in advance of the each scope refinement session, with the feedback informing the priorities for the session and initial drafting of the business canvases. Survey questions are based on scope feedback already received.
- A representative from an industry association will attend and act as moderator for each session. They will assist in ensuring voices are heard and the canvases are reflective of stakeholder sentiment.
- The sessions will be interactive and attendees are encouraged to send SMEs with relevant knowledge on the business need.

	When	Moderator	Invitees
Sub-Register and Issuer Sponsored enhancements and process improvements	25 May 9am-1pm Sydney, Bridge St.	AFMA (Damian Jeffree)	Settlement Participants, Share Registries
Settlement improvements and enhancements	19 June 9am-1pm Sydney, Bridge St.	AFMA (Damian Jeffree)	Settlement Participants
Corporate Action processing efficiencies	12 July 9am-1pm Sydney, Bridge St.	ACSA (David Travers)	Settlement Participants, Share Registries



Project scope

Feedback from industry and scope refinement engagement approach



Industry engagement

Newly formed industry Technical Committee established & meeting monthly



CHESS Replacement Partnership Program



Summary

- 16 February 2023 ASX announced the CHESS Replacement Partnership Program ("Partnership Program") as part of the 1H23 results release.
- The Partnership Program recognises that there is further cooperation required on the CHESS replacement project than originally anticipated, and aims to provide a financial contribution towards our stakeholders' engagement on the project going forward.
- Total of \$70 million across eligible stakeholders through a **Participant Rebate Pool** of \$15 million and a **Development Incentive Pool** of up to \$55 million.
- Payment of the Participant Rebate Pool will be made in **August 2023**.
- Initial payment under the Development Incentive Pool is expected to be made by **31 May 2023**. Balance of further financial support will be tied to future program milestones.
- 28 April 2023 ASX invited feedback from stakeholders on the proposed Development Incentive Pool eligibility criteria.
- Following feedback process, as well as numerous other stakeholder discussions since pausing CHESS replacement in late 2022, ASX has incorporated changes to expand the number of parties who will be eligible for the Partnership Program and increases the initial payment amounts.

Approach and feedback

Feedback received

- 77 organisations were approached for feedback via email
 - ASX made 19 follow-up calls
- ASX received feedback from 16 organisations 4 software vendors, 4 share registries, 7 participants and 1 AMO.
 - 10 organisations suggested no additional changes to the proposed eligibility criteria
 - 4 organisations were supportive of the proposed eligibility criteria
 - 6 organisations requested clarifications
 - 6 organisations were not supportive of the proposed eligibility criteria and suggested changes
- ASX then grouped the feedback into common themes linked to the proposed eligibility criteria, and assessed the impact and feasibility of any proposed changes to the criteria.

Feedback sentiment





Partnership program Eligibility Criteria Recap

Participant Rebate Pool

To be eligible to receive payment under the Participant Rebate Pool, a Program Participant must be a participant of ASX Settlement or ASX Clear in accordance with the ASX Settlement Operating Rules or the ASX Clear Operating Rules (as applicable).

Development Incentive Pool

To be eligible for the Development Incentive Pool, a Program Participant must be an entity developing a technology application to connect to and interact with the CHESS replacement solution, and which will be subject to technical accreditation by ASX. Each eligible participant will be categorised as a Tier 1, Tier 2 or Tier 3 Program Participant, and the allocated tier will determine the amount to which the Program Participant is entitled for both the initial and milestone based payments.

	Developing software to connect and interact with the CHESS	Number of messages being developed
	replacement solution and will be subject to ASX technical accreditation	
Tier 1	Yes	Greater than 85
Tier 2	Yes	Greater than 50 but equal to or less than 85
Tier 3	Yes	Greater than 15 but less than or equal to 50

ASX has determined that it is appropriate to include additional stakeholders as Program Participants in the Development Incentive Pool who do not otherwise meet the above criteria. This captures stakeholders who:

- a) will undertake major internal development to prepare their systems and operations to integrate with vendor systems, which supports key project milestones and a successful go-live of the CHESS replacement solution; and
- b) transmit and receive more than 5 million CHESS messages annually.

Feedback received

Feedback Themes	ASX Response	
 Short response window 	The response window balanced the need for timely feedback and prompt payment of the initial Development Incentive Pool amount by 31 May 2023.	
 Eligibility criteria should consider previously completed work (for example, CDE and ITE1) 	As the Partnership Program aims to provide a substantive financial contribution towards our stakeholders' engagement on the CHESS replacement project going forward, eligibility criteria focuses on indicators of future development effort.	
 Tier classification by number of messages developed to is too broad to act as eligibility criteria 	Number of messages developed (and accredited) is a measureable and objective criteria that acts as an indicator of development moving forward.	
 Number of applications should be considered as eligibility criteria 	In allocating payment entitlements, the proposed eligibility criteria will take into account the number of applications per organisation (which will in all cases be subject to technical accreditation).	
 Impact consideration of potential changes to mFund 	Proposed eligibility criteria will be inclusive of mFund CHESS message suite. Should this change, the message tallies across all tiers will be adjusted accordingly. There would therefore be no overall impact on tiering.	



Key questions and clarifications

Questions	ASX Response
 Is it mandatory to participate in the Partnership Program? 	No, it is not mandatory to participate in the Partnership Program. Those who are eligible for the Partnership Program will receive a letter of invitation.
 How are payments impacted if a program participant changes tier? 	Eligible entities are expected to develop and accredit to the number of messages their software supports. If there is a change in circumstances after the initial payment which may impact on an entity's allocated tier, ASX will reconsider the allocated tier for future payments.
 Will milestone payments be paid upon technical accreditation? How will this be handled as not all participants undertake accreditation at the same time? 	The milestone payment plan is subject to the solution decision (which is targeted for the end of 2023) and the subsequent consultation on the implementation plan that follows.
 How will ASX communicate the program roadmap, milestones and expectations from program participants? 	Eligible entities will received direct communication regarding the Partnership Program. ASX will communicate more general key Partnership Program updates through existing stakeholder engagement channels including Business Committee, industry webinars and EDMs.
 How will ASX handle multiple eligible entities within the same organisation? 	All entities that meet eligibility criteria will be invited to participate in the Partnership Program.
18 Industry Webinar I May 2023	

Proposed changes

Partnership Program (initial)



- Eligible stakeholders include Third Party Software Vendors, Share Registries and AMOs
- Eligibility criteria is based on number of messages developed to



Revised Partnership Program (as at 17 May 23)

- Development incentive pool of up to \$55 million with up to \$20 million initial payment scheduled for 31 May 2023.
- Eligible stakeholders include Third Party Software Vendors, Share Registries, AMOs and Clearing & Settlement participants developing in-house software.
- Eligibility criteria is based on number of messages developed to and also takes into account the number of applications an entity is developing and will be subject to technical accreditation
 - Incentive Program Participants with more than 1 application being accredited will be eligible for a payment of 1.5 times the tier payment amount.
 - The applications being developed must satisfy tier 3 at a minimum to qualify as an additional application.



Next steps





Q&A



Thank you.





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Media Release

18 May 2023

ASX enhances eligibility criteria for CHESS Replacement Partnership Program following industry feedback

Following a number of stakeholder discussions since pausing CHESS replacement in late 2022, ASX began developing the CHESS replacement Partnership Program ("**Partnership Program**") to recognise future industry cooperation on the project. The initiative was announced in February 2023.

Up to \$70 million has been allocated to the Partnership Program in total, with the development incentive facility component ("**Development Incentive Pool**") representing \$55 million of that amount. ASX invited CHESS stakeholders to provide feedback on the proposed eligibility criteria for the Development Incentive Pool earlier <u>this month</u>.

Today, ASX confirms it has updated the proposed eligibility criteria to incorporate industry feedback. The eligibility criteria now takes into account whether an entity is developing multiple applications that will connect and interact with the CHESS replacement solution. As a result, ASX has also revised the proposed initial payment from the Development Incentive Pool, increasing it from \$10 million to up to \$20 million.

These changes are in addition to an earlier adjustment to the criteria that would include stakeholders undertaking major internal development work to prepare their systems and operations for CHESS go-live, i.e., clearing and settlement (CS) participants developing in-house.

ASX Managing Director and CEO Helen Lofthouse said: "The Partnership Program is a forward-looking program, designed to provide a contribution towards stakeholders' future participation and cooperation for the successful progress and completion of the CHESS replacement project.

"When we were developing the Partnership Program, we wanted to recognise our customers that are CS participants, but we were also cognisant of the wider eco-system of stakeholders critical to the delivery of CHESS replacement, and this included software providers, share registries, and CS in-house development teams.

"The Development Incentive Pool is designed to address this broader set of stakeholders and the engagement we've undertaken has helped us refine the eligibility criteria which has also led to an increase in the total size of the initial payment."

ASX hosted an industry webinar on 17 May to step through the feedback with CHESS users and stakeholders, and to confirm the revised eligibility criteria.

Background on the Partnership Program

On 16 February 2023, ASX announced the CHESS Replacement Partnership Program. The purpose of the Partnership Program is to establish a framework to provide financial contribution towards stakeholders' participation with respect to the successful progress and completion of the CHESS replacement project.

The Partnership Program consists of two components:

- **Participant Rebate Pool** of \$15 million, from which amounts will automatically be paid to clearing and settlement (C&S) participants, distributed proportionately based on C&S fees paid to ASX by those participants during the period of 1 January 2023 to 30 June 2023. The rebate is designed to provide support through a one-off fee reduction, and will be paid in August 2023.
- **Development Incentive Pool** of up to \$55 million will be available to Program Participants that meet the eligibility criteria set out below. An initial payment is expected to be made by 31 May 2023 with the remaining payments tied to future program milestones, the timing and composition of which will be defined following the publication of a revised project plan that will come after completion of the solution redesign process. ASX has previously said it expects to announce the CHESS replacement solution design in the December quarter of 2023.

Eligibility criteria for the Development Incentive Pool

To be eligible to participate in the Development Incentive Pool, a Program Participant must be an entity developing a technology application to connect to and interact with the CHESS replacement solution, which will be subject to technical accreditation by ASX.

Entities will need to confirm the number and name of the technology applications they intend to develop.

Payment amounts for each technology application will be based on a tiering system as advised by ASX. Tiering is based on the number of messages being developed for each application.

Separately, ASX has determined that it is appropriate to include additional stakeholders in the Development Incentive Pool who do not otherwise meet the above criteria. This additional category captures stakeholders who:

- will undertake major internal development to prepare their systems and operations to integrate with vendor systems, which supports key project milestones and a successful go-live of the CHESS replacement solution; and
- transmit and receive more than 5 million CHESS messages annually.

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