

23 April 2024

Steven Hannan Senior Manager, Equities ASX Limited 20 Bridge Street Sydney NSW 2000

By email: CHESSReplacement@asx.com.au

Dear Steven,

Cboe Australia (**Cboe**) appreciates the opportunity to respond to CHESS Replacement: Consultation Paper on Staged Implementation Approach and Implementation of Release 1 (Clearing Services) (the **Consultation**)

The successful replacement of CHESS is critical to the effective functioning and stability of the Australian financial system. As a licensed market operator handling 20 percent of trading in Australian equities, CHESS is of critical importance to Cboe. Like many other stakeholders and regulators, Cboe wishes to see ASX deliver a CHESS replacement solution that is resilient, performant, interoperable, and will meet the current and future needs of the Australian marketplace.

However, Cboe has significant concerns that the approach outlined by ASX in the Consultation will fall short of these objectives.

Cboe's concerns fall into two key areas:

- 1. Increased risk due to the proposed project structure
- 2. Lack of action and engagement on interoperability

The following sections expand on these areas by providing our overarching comments in relation to the matters raised by the Consultation.

Increased risk due to the proposed project structure

Despite handling 20 percent of trading in Australian equities, Cboe does not have access to a highly performant, resilient interface for sending trades to CHESS. Cboe's connection is separate, unequal, and requires the use of an esoteric, outdated, and proprietary message format (EIS) and encryption standard (AS2805).

Cboe (and other non-ASX AMOs) are forced to bear the risks and consequences of reliance on such infrastructure, including:

1. Operational risks, for example being subject to capacity constraints that ASX Limited is not subject to;



- 2. Key person risks due to an ever-shrinking pool of individuals with expertise in these formats and standards; and
- 3. Reputational risks resulting from failures of aging infrastructure outside of Cboe's control.

The 2020 CHESS capacity constraint issue demonstrated that these risks and consequences are not just hypothetical, but have real world impacts on Cboe, investors, ASX, and the broader financial system.

Cboe is therefore not supportive of the project timeline as currently structured. Cboe considers a golive date for FIX 5.0 messaging to CHESS in Q2 2026 is excessively long and leaves all non-ASX AMOs at significant risk of further legacy system issues. Cboe notes that it first asked ASX for a FIX connection to CHESS in 2013 and that Q2 2026 is more than five years after the original target date for CHESS replacement.

Cboe considers the timeline for the FIX interface could and should be brought forward significantly, having regard to:

- 1. the criticality of reducing risks associated with the legacy system;
- 2. the expectations placed on ASX C&S to treat other AMOs equally to ASX Limited;
- 3. the limited scope of the changes (ultimately this aspect of Phase 1 consists of developing, testing, and accrediting to 5 FIX messages and 1 flat-file submitted via SFTP);
- 4. the limited population of users the changes are applicable to; and
- 5. the familiarity of that population with developing to the FIX protocol (including noting Nasdaq, which we understand is a service provider for other AMOs, also has extensive experience in this area).

Cboe notes the Indicative Release 1 Project Timeline includes more than year for AMO development, testing, and accreditation. This is not necessary.

Cboe has significant global experience in developing for FIX interfaces and considers that developing for a FIX interface to CHESS should not be a highly complex project.

Cboe is confident in its ability to complete the AMO Build and Test and the AMO Readiness steps in 3 months conditional upon ASX being able to provide:

- 1. A finalised FIX specification
- 2. A functional test environment;
- 3. Clear attestation criteria; and
- 4. Effective engagement in a timely manner during these steps.

In this context, Cboe wishes to better understand:

1. How ASX and TCS will ensure that what is available in a test environment is stable and fully mirrors the behaviour and functionality of the production environment, including what level



of functional testing ASX and TCS will undertake prior to releasing code to test environments for AMOs; and

- 2. What engagement will ASX and TCS undertake to ensure AMOs are transparently aware of:
  - a. Project timelines and milestones impacting AMO testing;
  - b. Release notices and known bugs lists;
  - c. Release fixes and timing; and
  - d. Testing completion across internal ASX CHESS work and the broader project?

Cboe is able and willing to work with ASX to ensure this aspect of Phase 1 can occur in a timelier manner, to reduce risk for all parties and deliver better outcomes for the Australian market.

With respect to other aspects of Phase 1 and their timetable, Cboe is not in a position to provide detailed comment on the one year allocated for R1 ASX Delivery. However, Cboe notes that ASX has planned for the AMO Build and Test phase to start only after ASX releases Drop 3. It is not clear to Cboe why this must be case and why, for example, AMOs could not start development work as soon as ASX makes a finalised specification available and complete their work once ASX makes a stable test environment available. Cboe would encourage ASX to consider whether the project timeline could be streamlined by having more processes occur in parallel and/or by finding other efficiencies.

In addition, the consultation indicates that Phase 1 will not go live until all AMOs are ready, thereby tying the release date to the pace of the slowest AMO. We do not consider this is appropriate. Choe makes up almost the entirety of current EIS message flow to CHESS by AMOs and, as set-out above, is at significant risk due to the extended timetable for its replacement by FIX. Other AMOs may not have the same need or incentive to prioritise the replacement of EIS by FIX, even in circumstances where the work required of AMOs is not particularly complex.

It appears to Cboe that the fact that Phase 1 will not go live until all AMOs are ready is a product of the structure and sequence of deliverables in Phase 1, in particular the proposed structure of interactions between TAS, the transitional clearing facility, and CHESS. Cboe suggests that ASX reconsider this approach and considers that a solution that would allow individual AMOs to connect to CHESS via FIX messaging, through the transitional clearing facility or otherwise, as soon as they are safely able, would be highly preferable from a risk reduction perspective.

Cboe is aware that these suggestions may require ASX to consider reorganising deliverables within Phase 1 or reconsider the phased approach more generally. Cboe is strongly of the view that it is in the best interests of market integrity and the reduction of systemic risk that this be done.



## Lack of action and engagement on interoperability

ASX has stated that ease of integration and global interoperability are guiding principles for CHESS Replacement<sup>1</sup>.

However, Cboe is concerned that:

- 1. ASX interprets interoperability narrowly and in a manner that will not deliver positive outcomes for the Australian financial system;
- 2. ASX has relegated support for (this narrow) interoperability into the distant future, thereby locking the Australian market into its current anti-competitive paradigm for the foreseeable future.

In Cboe's view, genuine interoperability in clearing and settlement requires:

- 1. Structuring clearing, settlement and CSD infrastructure and associated services in a way that is agnostic to customer & competitor, data source and destination, both upstream and downstream, to facilitate alternative service providers on an equal and non-discriminatory basis; and
- 2. Providing infrastructure and services with the same incentives, interaction, delivery, regulatory framework, and ongoing support for all customers, including those that compete in some or all services.

The Consultation narrowly focuses Phase 1 interoperability on the provision of FIX for trade acceptance and provides no further details on how or what ASX through TCS BaNCS intends to deliver for post-trade interoperability. The Consultation does not deal with items 1 or 2 adequately, which, in our view, is not consistent with the regulatory expectations or what ASX indicated following the announcement of TCS as selected yendor.

Furthermore, implementation of post-trade interoperability has been left for Phase 2 of the project, without timeframes as to when it would be delivered or indications of what it would entail. This significantly inhibits the ability of a committed competitor, Cboe or another, to emerge and locks in the current monopoly position for an extended period.

Cboe considers it is critical that there is genuine engagement regarding all aspects of interoperability and how it is to be implemented in CHESS Replacement now. At a minimum and as a matter of priority, ASX should provide certainty as what interoperability will mean within the context of the CHESS Replacement process. Further, given the movement towards TCS BaNCS, ASX should ensure that its clearing function delivers interoperable clearing services within Phase 1.

<sup>&</sup>lt;sup>1</sup> See <a href="https://www.asx.com.au/markets/clearing-and-settlement-services/chess-replacement/about-chess-replacement">https://www.asx.com.au/markets/clearing-and-settlement-services/chess-replacement/about-chess-replacement</a>



## **Consultation Questions**

In addition to Cboe's overarching comments above, for completeness, we have set out our responses to the specific questions of the consultation below.

- 1. Staged implementation Please provide feedback on the proposal to separate the CHESS Replacement Project into two stages, Release 1 (Clearing) and Release 2 (Settlement, Subregister).
  - Cboe does not support the two-stage approach for the reasons set out in our overarching comments.
- 2. Design, scope, and schedule for Release 1 (Clearing) Please provide feedback on the design, scope and schedule for Release 1 (Clearing).
  - Cboe does not support the design, scope, and schedule for Release 1 (Clearing) for the reasons in our overarching comments.
- 3. Release 1 Industry Testing approach Should the scope or approach for the industry test phases be changed in any way to ensure each are appropriate and fit for purpose for AMOs, CS Participants and Software Providers? Please provide supporting detail.
  - Cboe generally agrees with the objectives and sequence of industry test phases proposed by ASX. However, as set out in our overarching comments, Cboe considers that the time allocated for these steps is significantly more than what is necessary and should be reconsidered by ASX, including considering whether more elements of Phase 1 could occur in parallel, rather than sequentially.
- 4. Release 1 Industry Testing duration As an AMO, with the information currently provided, how much time do you estimate will be required to complete your build and test and prepare for Accreditation and Operational Readiness? As a CS participant, how much time will be required to complete regression testing for impacted messages?
  - Cboe considers 3 months should be sufficient for it to complete the AMO Build and Test and the AMO Readiness steps provided that Cboe's requirements (set out in our overarching comments and below) are met.
- 5. Release 1 Go Live Readiness Are there any processes in addition to Implementation Dress Rehearsals and Disaster Recovery Testing that would assist AMOs in preparing for go-live of Release 1?
  - In addition to the matters set out in our overarching comments, Cboe would like to emphasise the need for:



- Clear, frequent, and transparent communication when issues are discovered during the integration process;
- Rapid resolution of bugs and issues identified by ASX and AMOs while they integrate;
- If the project will require all AMOs to migrate at once:
  - o clear and frequent status updates from each AMO on their readiness;
  - plans for how to proceed if an AMO is unable to meet milestone dates and/or is holding up the go-live date;
- Quick turnaround/response to any questions raised by AMOs during the integration process;
- The ability to test complex scenarios related to disaster recovery and failures at any time with ASX, and not just during implementation dress rehearsals/disaster recovery tests.

Choe thanks ASX for the opportunity to make this submission.

If you have any questions, please contact Michael Somes (04013 95950) or me.

Yours sincerely,

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