ASX
CHESS Replacement

AMO Working Group

14 November 2024

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Acknowledging Country

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

Artwork by Lee Ann Hall, *My country My People*

Housekeeping

Troubleshooting

> Please mute yourself when not speaking

> Please use the 'raise hand' feature on MS Teams if you would like to ask a question

> Please introduce yourself when talking for the benefit of all members

> Meeting is being recorded for the purposes of capturing decisions and actions

> Dial in details (audio only):

  • +61 2 7208 4607

  • Phone Conference ID: 197 583 790#

> Presentation materials were distributed before the meeting and will be published on the website

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Important Information

Competition Law Reminder

Workshop members are reminded to have regard to their obligations under competition law. In particular, please note that the Competition and Consumer Act prohibits a corporation from engaging with one or more persons in a concerted practice that has the purpose, effect or likely effect of substantially lessening competition.

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Agenda

01
Welcome, Open Actions & Feedback

For discussion

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01 – Open Actions

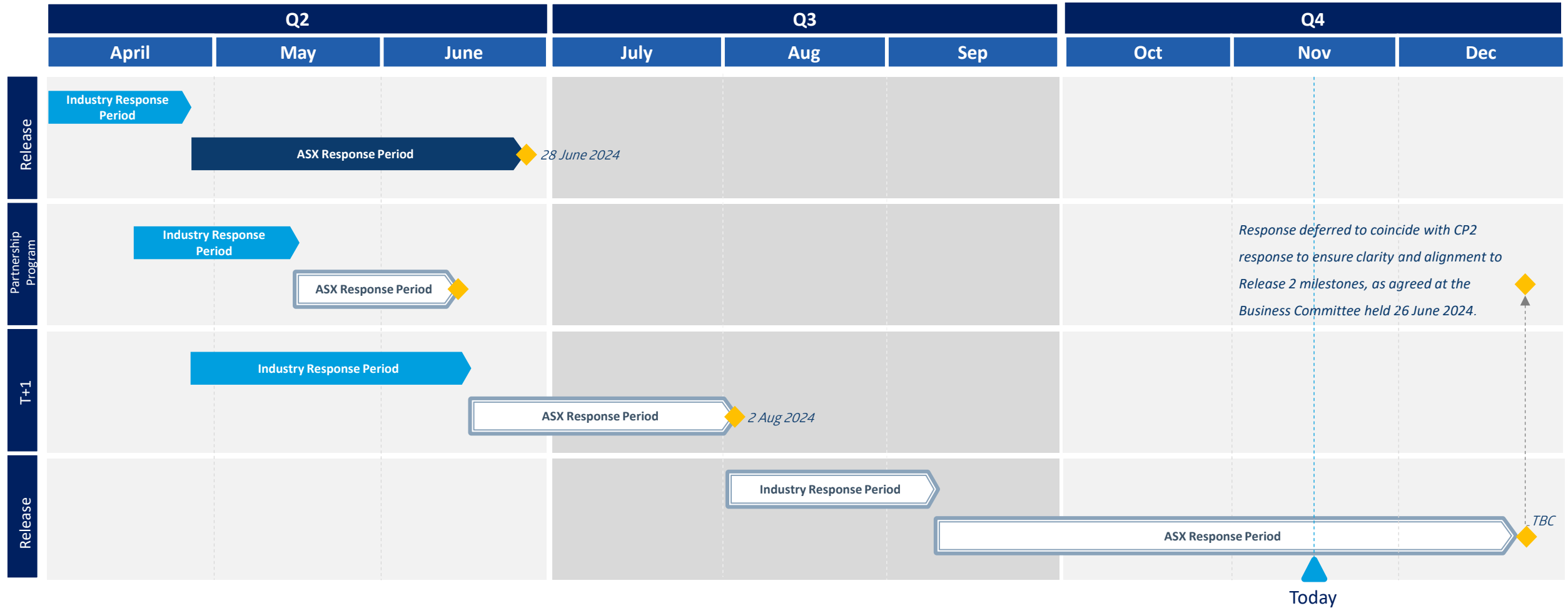| #	Topic	Action	Raised	Due	Owner	Status
1	Account Segregation	ASX to confirm with AMO's inclusion of Account Segregation in FIX in R2 timeline	26 Sep 2024	14 Nov 2024	ASX	In Progress
2	Reference Data	ASX to investigate whether current reference data can be provided	26 Sep 2024	14 Nov 2024	ASX	Propose to close – Refer to Slide 16
3	Reporting	**Security Detail Messages** – ASX to confirm optionality to receive security definition messages and potential risks/impacts if this field is mandatory	26 Sep 2024	14 Nov 2024	ASX	Propose to close – Refer to Slide 11
4	Reporting	**Security Details Report** – ASX to document the proposal and to include as an Agenda item at the next AMO WG	15 Aug 2024	14 Nov 2024	ASX	Propose to close – Refer to Slide 11
5	FIX Messaging	**Segregation Field** - Additional information to be provided to AMOs to seek feedback of proposal	15 Aug 2024	14 Nov 2024	ASX	Propose to close – Action will now be tracked in Action 1
6	Connectivity Options	**AWS to AWS** - ASX to investigate possible connections to our AWS instance from an AMO's existing AWS hosted site	15 Aug 2024	Ongoing	ASX	In progress - Update provided at 6 November Technical Committee meeting. Refer to Slide 20
7	Testing Scenarios	AMOs to provide input as to the failover / DR scenarios they would like covered in the testing plan	15 Aug 2024	Q4 2024	AMO	In Progress
8	C&S Interoperability	Review future usage of this component to determine timeframe to build/deliver and ability to test for Release 1 (i.e. is it just project testing, or are AMOs required to test?)	28 May 2024	Q4 2024	ASX	Propose to close – Dummy fields provided in Release 1 and will be addressed via CP2
9	Forward Calendar	ASX to prepare a roadmap to provide stakeholder impact visibility across the major work streams running in tandem (such as current CHESS initiatives, CHESS replacement, and T+1).	28 May 2024	Ongoing	ASX	Propose to close – Customer Impact Plan is now available
10	FIX Messaging	ASX to provide iterative updates on FIX specification document to AMOs AMOs to provide feedback on FIX messaging specifications provided 12 June 2024	28 May 2024	Ongoing	AMO & ASX	In Progress
11	Release 1 Documentation	ASX to provide further detail on the Release 1 documentation	28 May 2024	Q4 2024	ASX	In Progress – Refer to Appendix 3
12	Forward Workplan	AMOs to provide topics for working group forward work plan	5 Dec 2023	Ongoing	AMOs	In Progress – Standing action

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02
Public Consultation Update

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02 – Public Consultation Update

Indicative inflight & planned CY 2024 public consultation

KEY: ■ Inflight Industry ■ Inflight ASX □ Planned ◆ ASX Response

	Q2			Q3			Q4		
	April	May	June	July	Aug	Sep	Oct	Nov	Dec

Release
- Industry Response Period
- ASX Response Period ◆ *28 June 2024*

Partnership Program
- Industry Response Period
- ASX Response Period ◆
- *Response deferred to coincide with CP2 response to ensure clarity and alignment to Release 2 milestones, as agreed at the Business Committee held 26 June 2024.* ◆

T+1
- Industry Response Period
- ASX Response Period ◆ *2 Aug 2024*

Release
- Industry Response Period
- ASX Response Period *TBC* ◆

Today

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03
Security Details Report

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03 – Security Details Report

FIX SecurityDefinition [type 'd'] message update

> It was noted at the 28 September AMO WG that EIS queries supported in current CHESS are planned to be replaced by a FIX message and sent over the FIX interface

> The unsolicited batch of FIX messages are expected to be sent automatically on FIX session establishment **where the CompID subscription flag is set to TRUE**
>   - AMOs can be provided the option to unsubscribe from the security details messages per FIX CompID
>   - Each CompID can be separately configurable to either receive or not receive the messages
>   - AMOs can filter the relevant securities based upon the MIC code on each message of the primary listing venue
>   - **NOTE: Any FIX CompID that is configured to receive the security details messages are expected to receive messages for ALL securities, not only those securities that are traded on the receiving AMO's market**

> NOTE: No backup mechanism is currently planned at this stage (e.g. FTP file transfer).

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04
Account Segregation in FIX

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04 – Account Segregation in FIX

A new field was added to the FIX TradeCaptureReport (AE) message to capture whether the trade should accrue to a House or Client account.

Release 1

> For Release 1, the new field is not expected to have a business impact on the processing of trades sent to the TAS, and any future use of this field would be subject to industry consultation and agreement on an approach to account segregation

> The tag is an optional field. CHESS will not validate, store or process the data if it is supplied

> AMOs can choose to ignore this field when encoding the FIX AE message. If the field is encoded on an incoming AE message, it will not be processed or stored (it will be dropped).
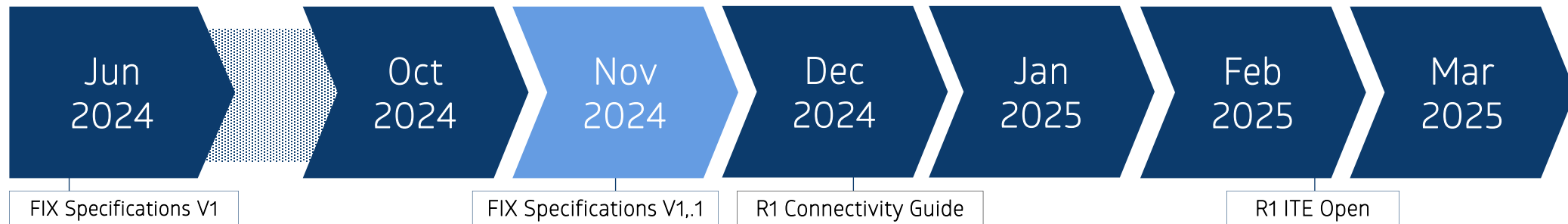
Release 2

> For Release 2, the use of account segregation functionality is still pending the outcome of industry consultation

> Relevant updates will be provided in the AMO WG meeting.

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05
ITE Readiness

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05 – Industry Test Environment (ITE) Readiness and Indicative Milestones

ITE availability is approximately 3 months away. ASX is seeking to understand from AMOs and their Software Providers on how their development is tracking and their confidence levels for connecting to ITE when it opens.

Jun 2024	Oct 2024	Nov 2024	Dec 2024	Jan 2025	Feb 2025	Mar 2025

FIX Specifications V1		FIX Specifications V1,.1	R1 Connectivity Guide		R1 ITE Open	

FIX Specifications V1.1

V1.1 updated FIX Specifications was published on 13 November and included:

> Minor updates/clarifications to V1 Specifications TradeCaptureReportAck, 141 ResetSeqNumFlag, 452 Party Role, NoPartyIDs, plus addition of new Security Definition (D) message

> New sections:
  - CHESS FIX Gateway Failover
  - FIX Client Session Recover Process
  - Onboarding
  - Encryption
  - Alternate File Interface.

R1 Connectivity Guide

Release 1 Connectivity Guide (for ITE) is scheduled to be published in mid-December and is expected to include:

> Network Details

> Security Details including Certificate Management

> ASX Net Connection Details

> FIX Gateway Connectivity.

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05 – Reference Data Update for AMO Build and Test Phase

Recap

> It was noted in the 28 September AMO WG that the AMO Build & Test ITE environment could be seeded with "Production Like" reference data which would be periodically updated during the initial stages of the testing period

> Once available, the daily synchronisation processes are planned be deployed on the ITE environment

> Feedback was provided at the AMO WG meeting on whether current reference data could be provided instead of data from the previous day.

ASX proposes to apply reference data updates on the same day, meaning reference data is current. Due to operational constraints, this may result in the ITE environment not being available until 10am each day.

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06
Network Design & Failover

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Considerations

> AMOs can choose to use the same CompID for both AMO Production and DR site
>
> - Using the same CompID means the FIX session state should be synced between Production and DR sites
> - This setup ensures FIX sessions can be resumed on DR event at AMO end (i.e. FIX Session level message recovery)

> Alternatively, AMOs can choose to use two independent CompIDs (e.g. COMP1 for Production and COMP1-D for DR)
>
> - When switching to COMP1-D, it is the responsibility of the AMO to resend any inflight messages, i.e. any trade and trade cancel messages that were transmitted by the COMP1 and that were not acknowledged, should be resent via the COMP1-D FIX session
> - If these messages had already been received and processed successfully, a duplicate reject is expected to be sent on the COMP1-D FIX session. Price messages are not expected to be rejected as duplicates.

The following table indicates how the resent messages are expected to be processed:

Original Message & Response (COMP1)	Treatment of Resent Messages (COMP1-D)
AE New Trade, Accepted	Duplicate Reject
AE New Trade, Pending	Duplicate Reject
AE New Trade, Rejected	Processed
AE Trade Cancel, Accepted and Trade Cancelled	Duplicate Reject
AE Trade Cancel, Rejected	Processed
W Price message, Accepted	Processed
Pending AE Accepted or Rejected by ASX: AR response	No response, as the original message had COMP1 as Sender CompID. Requires manual intervention to confirm the status of the trade.

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07
AWS to AWS Connectivity

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07 – AWS to AWS Connectivity

Summary Update

> Member feedback was received to investigate possible connections to ASX's AWS instance from an existing AWS hosted site at the 15 August AMO WG

> ASX is currently assessing the technical and commercial components and is planned to engage with the industry in 2025 to validate the demand for this option.

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08
Forward Engagement & AOB

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08 – Upcoming Engagement

Indicative AMO Working Group engagement plan

	2023		2024										
	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	Jun 24	Jul 24	Aug 24	Sep 24	Oct 24	Nov24	Dec 24
Business Committee		▲ 06/12 BC			▲ 20/03 BC			▲ 26/06 BC			▲ 18/09 BC			▲ 11/12 BC
Technical Committee	▲ 24/11 TC			▲ 07/02 TC	▲ 07/03 TC	▲ 03/04 TC	▲ 08/05 TC	▲ 06/06 TC	▲ 10/07 TC	▲ 07/08 TC	▲ 11/09 TC	▲ 09/10 TC	▲ 06/11 TC	▲ 03/12 TC
AMO WG				▲ 01/02 R1 Consultation		▲ 11/04 FIX Messaging, failover and EOD message processing	▲ 28/05 Public consultation update, FIX Specification, Validation rules		▲ 03/07 FIX specification and release notes, gateway failover options	▲ 15/08 Trade conditions & quotation codes, FIX gateway failover options	▲ 26/09 Trade conditions codes, FIX gateway failover options		▲ 14/11 Fixed specifications, security details report	▲ 12/12 (TBC)
	CY23 Q4		Q1			Q2			Q3				Q4	

Month	Date	Time
Technical Committee		
December meeting	Tuesday 3 Dec	2:30pm – 4:30pm

Month	Date	Time
Business Committee		
December meeting	Wednesday 11 Dec	4pm – 6pm

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Closed Actions

#	Topic	Action	Raised	Due	Owner	Status
1	FIX CompIDs	AMOs to provide guidance on how they'll be configuring their flow across multiple FIX sessions	11 April AMO WG	15 Aug 2024	AMOs	CLOSED
2	Condition Codes & Basis of Quotation Codes	Prepare short paper to validate when a new or unknown code is introduced to the conditions code table and basis of quotes	3 Jul 2024	15 Aug 2024	ASX	CLOSED
3	FIX Messaging	**Condition Codes & Basis of Quotation Codes** - ASX to consider removing these from scope and replacing them with a net / non-net and novate / non-novate identifier	15 Aug 2024	26 Sep 2024	ASX	CLOSED
4	Network Design	**Network Architecture & Failover** - ASX to investigate alternative options raised regarding design elements of failovers.	11 April AMO WG	26 Sep 2024	ASX	CLOSED

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Appendix 1 – AMO WG Decision Register

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Appendix 1a – Decisions and Amendments

Decision ID	Topic	Decision	Date of AMO WG Decision
AMO-DR001	Condition Codes (refer to Appendix 1b)	Code usage to remain as is.	15 Aug 2024
AMO-DR002	FIX Gateway Setup (refer to Appendix 1c)	Modified FIX gateway setup and failover architecture.	26 Sep 2024

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Appendix 1b – AMO-DR001: Trade Condition & Quotation Codes

As presented in the 15 August AMO Working Group

Summary

Context for today:

Currently, CHESS accepts trades with a set of up to **eight** "Condition Code" fields which will be reduced to **five** in CHESS replacement. Current CHESS validates the Condition Code values based upon a set of defined values which will continue in CHESS replacement against a configured list.

Some key things to note:

> If a trade is received by CHESS with an unknown (unconfigured) Condition Code, it will be **rejected**

> Condition Codes also establish novation & netting eligibility for trades, eg trades with the 'LN' (Loan of Securities) Condition Code are not eligible for novated or netting

> AMOs are primarily responsible for determining what Condition Codes are in use.

What is the ask of AMOs regarding Trade Condition Codes?

The current Condition Code set (as defined in both the EIS specification and the CHESS production configuration) is out of date and out of sync with the AMO published codes *(see next slide).*

We are proposing that the AMO WG is the venue for validating the Condition Code list for CHESS replacement and moving forward it should be the forum for maintaining the Condition Codes list on an ongoing basis, to help:

> Align the current set of codes across AMOs

> Align and update documentation in ASX Guides and on each of the AMO's respective websites

> Set the process (steps and timeframes) going forward for any new, adjusted or deleted codes.

The Ask

AMOs to review the Condition Code list using the Excel spreadsheet provided for additional input and guidance. *(Please see next slides for details)*

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As presented in the 15 August AMO Working Group

The following public documents were used as the basis for this analysis which compared the values noted in the AMO's Condition Code page(s) against the EIS and the current CHESS configured values:

Reference Links

AMO1	
AMO2	
AMO3	

Observations

> An AMO's documented codes do not match the 2-character codes as specified in the EIS documentation

> The mapping indicates the codes that are documented to be in use at ASX and an AMO respectively

> Within the EIS Specification document:

- Some codes that are active and configured in CHESS are not documented

- Many codes appear to be redundant

> The documents referenced above may not contain the most current set of data - **AMO's to confirm.**

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Appendix 1b – AMO-DR001: Current Mapping of Condition Codes to AMO

As presented in the 15 August AMO Working Group

Below is an extract of the initial mapping of Condition Codes to AMOs, which will need to be reviewed by AMOs.

CC	Description	CHESS	AMO 1	AMO 2	AMO 3
AB	ASX Bookbuild	Y	Y	N	N
AM	ASX Match	Y	Y	N	N
AP	AS PRINCIPAL	Y	N	N	N
BB	Bulletin Board Trade	Y	Y	N	N
BC	Preferenced Any Price Block Trade	Y	Y	Y	N
BK	Buy Back	Y	Y	Y	N
BL	Blocked from Transaction Netting	Y	Y	N	N

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Appendix 1b – AMO-DR001: Next Steps

As presented in the 15 August AMO Working Group

Feedback Request

> Please review the full set of Condition Codes in the Excel spreadsheet provided:

- **AMO 1, AMO 2** and **AMO 3**: confirm the listed Condition Codes are accurate, **by Friday 30 August 2024**
- **AMO 4**: provide a list of the trade Condition Codes you propose to use, **by Friday 30 August 2024**

Next Steps

1. ASX proposes that the Condition Code list will be published as part of the FIX specification, once reviewed
2. Agree an ongoing process and timelines for maintaining relevant industry configuration, including the Condition Code list
3. Consideration to incorporate the review of '**Basis of Quotation'** codes in the above process, once agreed
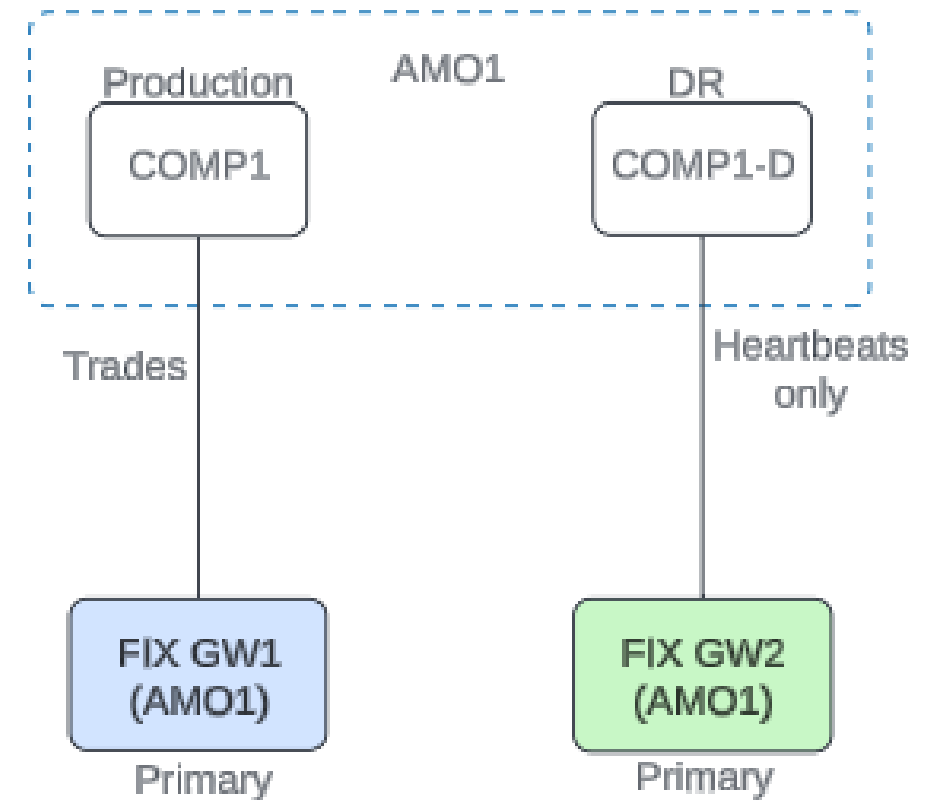
Appendix 1c – AMO 1 Feedback on FIX gateway set up

As presented in the 26 September AMO Working Group

Concept A

> AMOs will have 2 FIX Comp IDs, COMP1 and COMP1-D. COMP1 is for PROD and COMP1-D is to support the AMO's DR (**not** CHESS DR)

> For these two FIX Comp IDs, AMOs desire two independent services and network routes

> Both Comp IDs will create active FIX Sessions at any given time

> COMP1 Session will send trade messages and receive acknowledgements

> COMP1-D Session will be active, only sending and receiving FIX heartbeats

> Any component failure at the CHESS replacement end should **not** disconnect both connections

> When switching to COMP1-D, AMOs will be responsible for resending any inflight messages from COMP1

**Note**: The two Comp IDs are independent, and FIX messages are only recoverable within a Comp ID.

Conceptual view only

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Appendix 1c – AMO 2 Feedback on FIX gateway set up

As presented in the 26 September AMO Working Group

Concept B

> AMOs will have 1 FIX Comp ID, COMP1 for Production and DR

> There will be 2 FIX Gateways, a Primary and Warm standby. Primary and Warm standby will share a FIX Session

> From the AMO's point of view, only the Production COMP1 will create an Active FIX Session and submit trades

> When the FIX GW1 Primary (blue) goes down, the Production COMP1 will re-establish connection to the newly promoted Primary (yellow) and resume FIX Session

> When there is a DR event at the AMO's end, the COMP1 will connect from AMO DR to the available Primary FIX Gateway and resume the FIX session

Conceptual view only
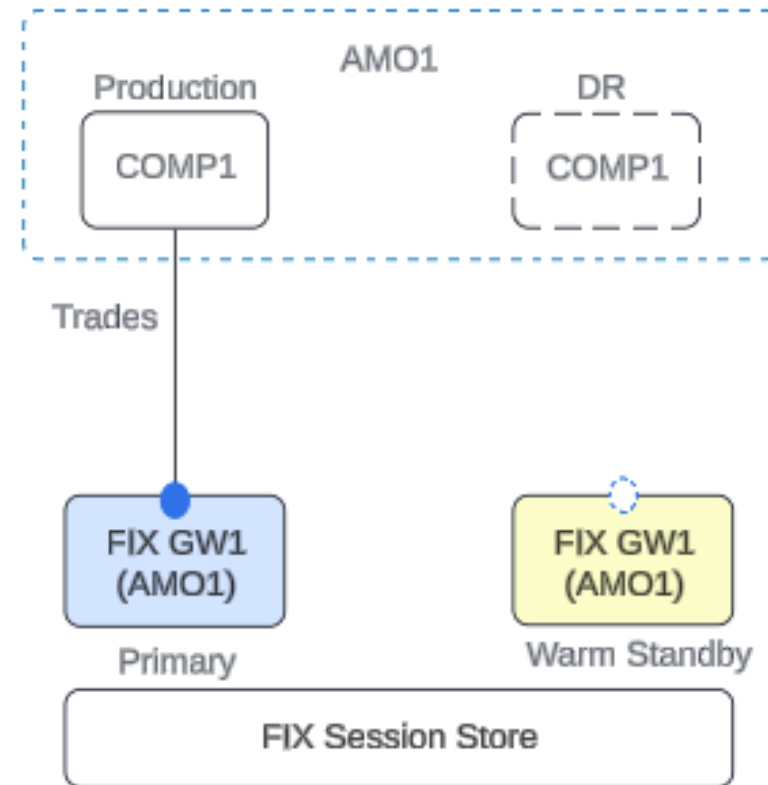
Appendix 1c – Influencing Factors

Factors contributing to the FIX Gateway Solution

> Security:

- [1]RBA Financial Stability Standards (FSS) for Central Counterparties: standard 16.3

- ASX considers the most appropriate way of meeting these requirements is to have mTLS and multifactor authentication on [3]F5 in place.

> Availability:

- [2]RBA FSS for Central Counterparties: standard 16.3

- The CHESS-R system availability target is **99.95%**. Consistent with this, the FIX Channel must also be 99.95% available

> Resilience:

- FIX Session state shared between Primary and Standby Gateways to support FIX Session failover, reducing failover complexity for AMOs

- Automatic failover of FIX Gateway

> Designed for scalability:

- FIX Gateway per AMO (and each Gateway) can support one or more FIX Sessions to facilitate sharding

> Cloud deployment:

- Running in Elastic Kubernetes Service (scaling, flexibility, self-healing) and leveraging multiple availability zones.

Note 1: Descriptions of the FSS requirements noted as 1, 2 & 3 above are in appendix 2.

Note 2: This slide has been amended from the version presented on 26 September 2024 to reference 16.3 of the RBA FSS

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Incorporating AMO feedback and influencing factors as presented as presented in the 26 September AMO Working Group
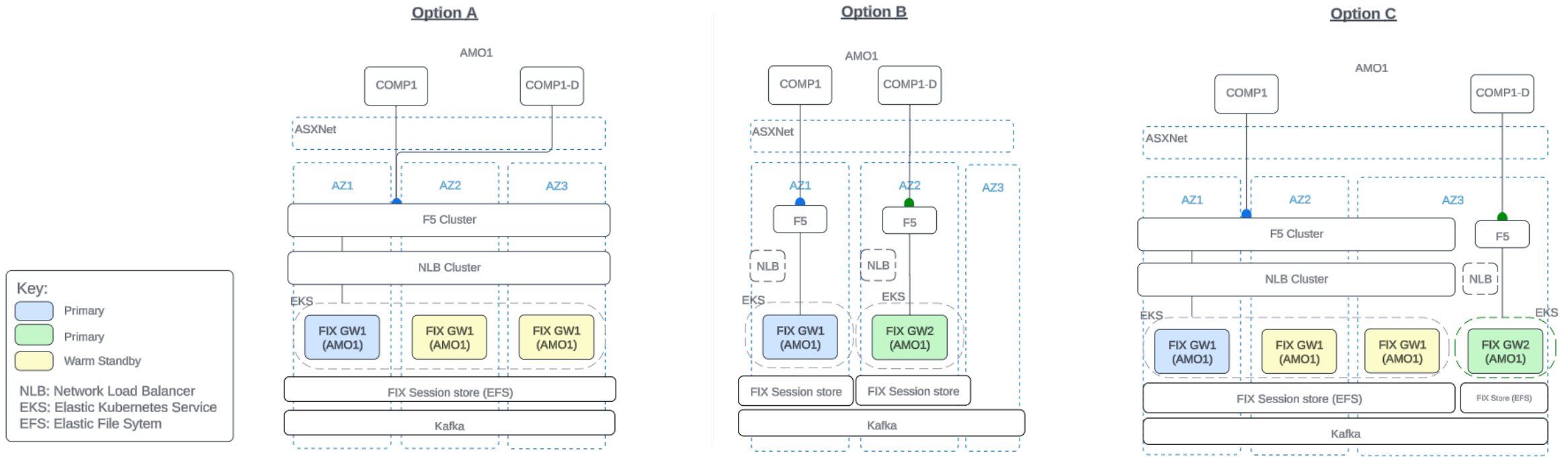
	Option A	Option B	Option C
Concept A	Partially Met (connections are not isolated)	Met	Met
Concept B	Met	Not Met (No warm standby FIX Gateway instance)	Met
Security	Met	Met	Met
Availability	Met (99.99%)	Not Met (99.00% due to single AZ setup)	Met (99.99% COMP1, and 99.00% COMP1-D)
Cloud deployment	Met	Partially Met (does not leverage multi-AZ for resilience)	Met

Note: Availability computation details are provided in the Appendix

Appendix 1c – AMO-DR002: Additional Clarifications

Further clarification as requested during AMO bilaterals as presented in the 26 September AMO Working Group

> Network Load Balancer (NLB) behaviour

- From AWS SME

  o Every packet in the connection, in both directions, will flow through NLB. NLB uses AWS Hyperplane architecture, that has different components for connection tracking and packet routing. This results in packets initiating the connection hitting different subsystems than the packets throughout the life of the connection

  o NLB is a distributed system (cluster), so a single instance / node failure will **not** directly cause TCP/IP disconnection

> Quantity of F5 instances per AZ

- One F5 per AZ, in the setup there will be 3 F5 instances

> Virtual vs physical devices in the setup

- All components are virtual.

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Appendix 1c – AMO-DR002: Additional Clarifications

Further clarification as requested during AMO bilaterals as presented in the 26 September AMO Working Group

> Behaviour of Standby FIX Gateway

  - Standby FIX Gateway will be running and listening to heartbeats from the Primary Gateway

> FIX Gateway Failover Time

  - 60 seconds is considered to be a reasonable failover time in the context of post trade messaging as it is not latency sensitive (5 minutes under normal load and 10 minutes during peak load)

  - FIX Connection Heartbeat (FIX Client and Server)

    o FIX Connection heartbeats recommended setting is 30 seconds (5 to 60 seconds) as documented in the CHESS Replacement FIX Specification

    o FIX Protocol documentation suggests waiting for 2 heartbeats (+ 'reasonable time') before breaking the connection

  - FIX Gateway Primary Heartbeat

    o FIX Gateway Primary sends heartbeats to indicate it is alive – the heartbeat interval is 20 seconds

    o The Warm standby promotes itself to Primary if 3 heartbeats are missed (i.e. 60 seconds)

    o Reducing the heartbeats to a shorter interval (<5 seconds) may result in false failover attempts by the Standby instances

  - To be tested: if we can safely reduce the promotion from Warm standby to Primary to ~30 seconds.

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Appendix 2 – Supporting Information

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Appendix 2 – RBA Financial Stability Standards for Central Counterparties

Operational Risk

16 A central counterparty should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the central counterparty's obligations, including in the event of a wide-scale or major disruption.

Identifying and managing operational risk

16.3 A central counterparty should have clearly defined operational reliability objectives and should have policies in place that are designed to achieve those objectives. These policies include, but are not limited to, having: exacting targets for system availability; scalable capacity adequate to handle increasing stress volumes; and comprehensive physical and information security policies that address all potential vulnerabilities and threats.

Link: https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/standards/central-counterparties/2012/standard-16.html

Note: *This slide has been amended from the version presented on 26 September 2024 to reference ASX's obligations under 16 and 16.3 of the RBA FSS*

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Appendix 2 – Why Mutual TLS Connection on ASXNet?

> Consistent with ASX's obligations under the RBA FSS: Data should be protected from loss and leakage, unauthorised access, and other processing risks, such as negligence, fraud, poor administration and inadequate recordkeeping. A central counterparty's information security objectives and policies should conform to commercially reasonable standards for confidentiality, integrity, authentication, authorisation, non-repudiation, availability and auditability (or accountability)

> NIST SP 800-57 Part 2 Rev.1 under Non-repudiation. In a general information security context, assurance that the sender of information is provided with proof of delivery, and the recipient is provided with proof of the sender's identity, so neither can later deny having process the information. This can be achieved through multi-factor authentication

> Mutual TLS enables multi-factor authentication by authenticating client certificate and validating the client certificate against a known range of IP addresses.

Options	RBA FSS Requirements	ASX Security Requirements
No TLS	Confidentiality not met Authentication is weak (unencrypted password password)	Encryption not met Strong authentication not met
Server side only TLS	Confidentiality is met Authentication is single factor (encrypted password)	Encryption is met Strong authentication partially met
Mutual TLS	Confidentiality is met Authentication is strong	Encryption is met Strong authentication is met

Note: This slide has been amended from the version presented on 26 September 2024 to reference ASX's obligations under the RBA FSS

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Appendix 3 – Indicative Release 1 Documentation Forward Plan

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Activity	Subject	Purpose	Planned Date	Status
Publish Documentation	Release 1 Industry Test Approach	Describe the detailed industry test approach and expected activities of each involved party, as well as timing, entry and exit criteria and expected test outcomes of all Release 1 industry test phases	Q3 2024	Published 6 Sept 2024
Publish Documentation	Release 1 FIX Specifications	Provide a detailed specification of all FIX messages, including message structures, rules, and message flow diagrams. Market-relevant specifications will be published in iterations as ASX analyses and completes designs for each drop	Q4 2024	
Publish Documentation	Release 1 Connectivity Guide	Detail the technical connectivity requirements to connect to the CHESS replacement system, including connectivity method(s), network details and security details	Q4 2024	
Engagement Activity	Release 1 Activity and Progress Tracking Overview	Interactive session to provide an overview and discuss ASX proposed test phase activity and progress tracking approach	Q1 2025	
Engagement Activity	Release 1 AMO Accreditation Overview	Interactive session to provide an overview and discuss the prerequisites and process for performing AMO Accreditation	Q1 2025	
Publish Documentation	Release 1 AMO Accreditation Guide	Provide detail on the CHESS replacement AMO Accreditation phase, expectations regarding conduct and expected results including the Accreditation process, connectivity, and message scenarios	Q1 2025	
Engagement Activity	Release 1 Clearing Regression Deep Dive	Deep dive workshop to provide an overview and discuss the prerequisites and process for performing Clearing Regression activities, identify and understand industry requirements on topics requiring further consideration, and finalise approach to Clearing Regression	Q2 2025	
Publish Documentation	Release 1 Clearing Regression Test Guide	Detail the minimum ASX-specified Clearing Regression test scenarios, key activities and expectations regarding conduct and expected results including entry and exit criteria	Q2 2025	
Engagement Activity	Release 1 Operational Readiness Overview	Interactive session to provide an overview and discuss the prerequisites and process for confirming Operational Readiness	Q2 2025	
Publish Documentation	Release 1 Guide to Operational Readiness Phase	Detail the Operational Readiness scenarios including mandatory success criteria	Q2 2025	
Engagement Activity	Release 1 Cutover & Migration Approach Overview	Interactive session to provide an overview and discuss the approach to Cutover & Migration	Q2 2025	
Publish Documentation	Release 1 Cutover and Migration Approach	Detail the minimum ASX-specified Clearing Regression test scenarios, key activities and expectations regarding conduct and expected results including entry and exit criteria	Q2 2025	
Engagement Activity	AMO Parallel Test Overview	Interactive session to provide an overview and discuss the approach to Parallel Test	Q2 2025	
Publish Documentation	Release 1 Guide to AMO Parallel Test	Provide detail on the Parallel Test phase, key activities and expectations and expected results including entry and exit criteria	Q3 2025	
Engagement Activity	R1 Cutover Deep Dive	Deep dive workshop to provide an overview and discuss the prerequisites and process for performing Cutover activities, identify and understand industry requirements on topics requiring further consideration, and finalise approach to structuring Cutover Runbook	Q3 2025	
Publish Documentation	R1 Cutover Runbook	Provide AMOs with key tasks and milestones, with an outline of detailed steps including planned timing. The runbook will be used in dress rehearsals and refined as required ahead of the final go-live event. Note that the cutover runbook will also include the steps required to rollback	Q3 2025	

Key | Complete | New Updates

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Thank you.

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