



ASX Equities Market  
Working Group  
Service Release 15

Friday 27<sup>th</sup> September 2024

ASX acknowledges the  
Traditional Owners of  
Country throughout Australia.

We pay our respects to  
Elders past and present.

ARTWORK BY: LEE ANNE HALL, MY COUNTRY MY PEOPLE



# Equity Market Working Group - Agenda

01 Welcome and overview

02 CDE+ Roadmap

03 OSPA Review

04 FIX & MDF Functionality

05 Network infrastructure changes

06 Next steps

# Equity Market Working Group – Welcome & Overview



## Purpose

- Serve as the primary forum for consistent engagement with stakeholders concerning ASX equities market and the ASX Trade platform



## Responsibilities

- Our goal is to offer prompt updates containing relevant information, enabling stakeholders to efficiently plan and allocate resources
- Feedback from stakeholders will play a pivotal role in defining and shaping industry-wide readiness activities

# Equity Market Working Group – Housekeeping

- ✓ Your cameras & microphones are off
- ✓ Questions can be submitted by using the Q&A panel
- ✓ Meeting is being recorded and registrants will be sent a replay link
- ✓ Presentation materials will be made available
- ✓ All relevant questions and answers will be published

# Equity Market Working Group – Presenters & Panelists

- **Presenters**

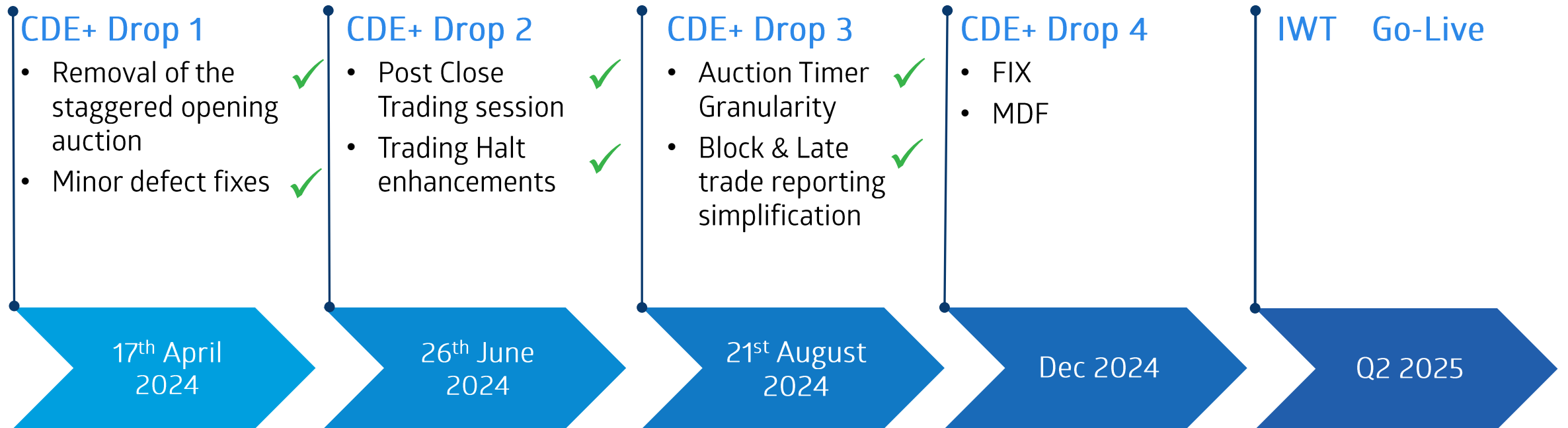
- Jamie Crank – Group Executive, Technology and Data
- Andrew Walton – General Manager, Trading
- Jimmy Halstead – Head of Trading Technology
- Ed Hearle – Product Manager, Markets
- Donna Gale – Product Manager, Markets
- Nick Rakebrandt – Head of Enterprise & Customer Networks

- **Moderator**

- Rob Nash – Head of Equities Relationship Management

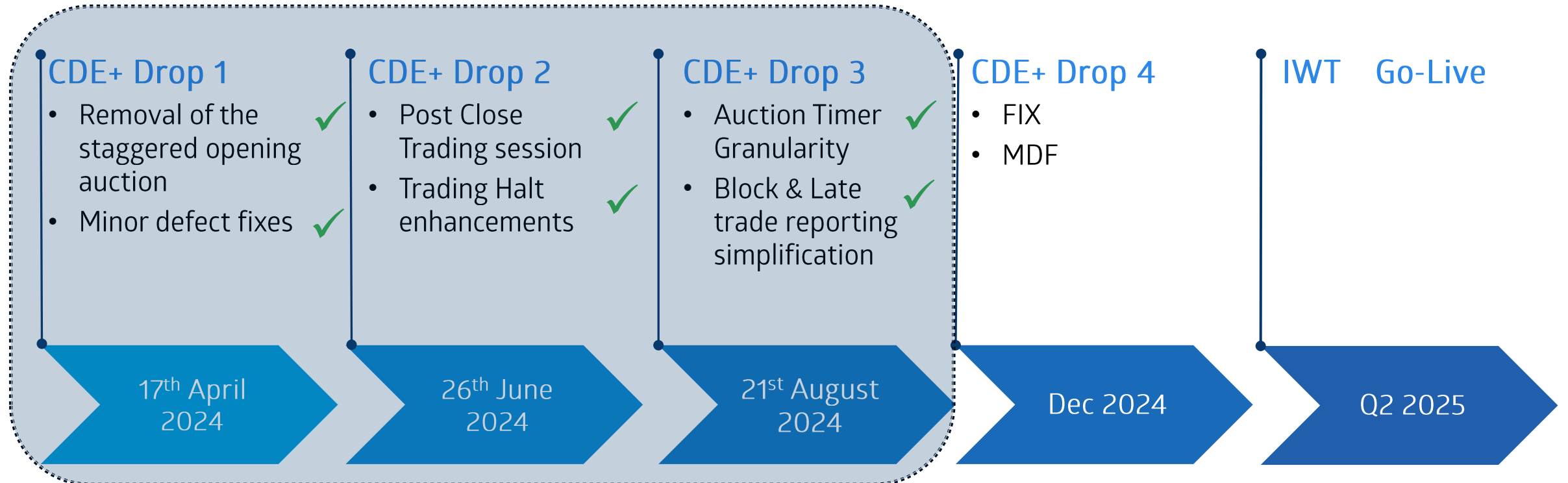
# CDE+ Roadmap

# CDE+ Roadmap Update



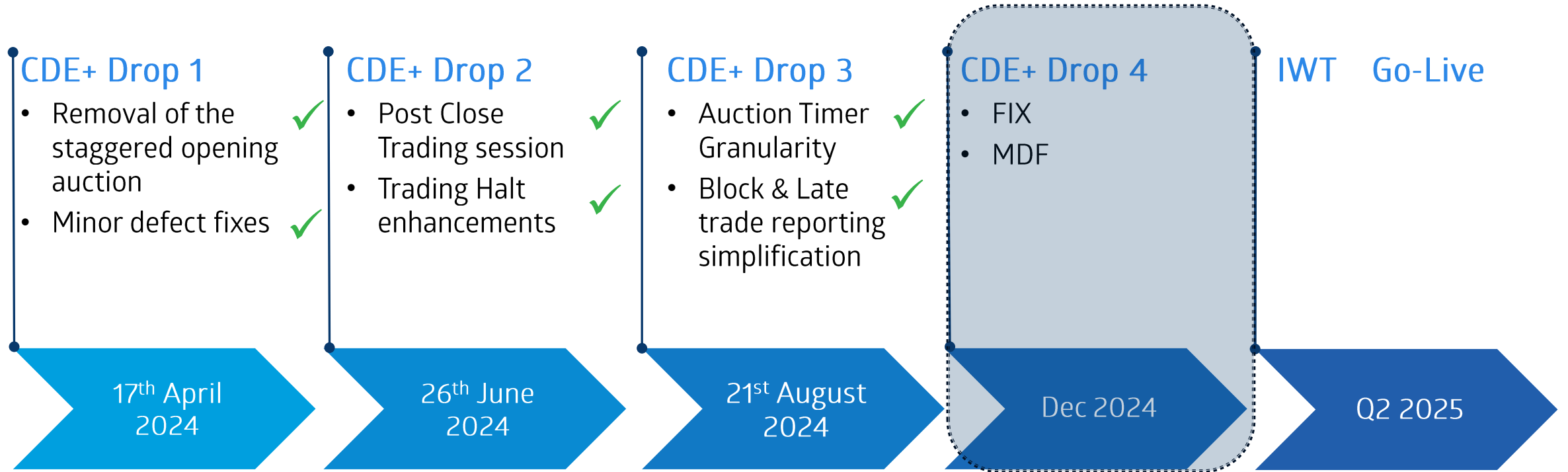


# CDE+ Roadmap Update



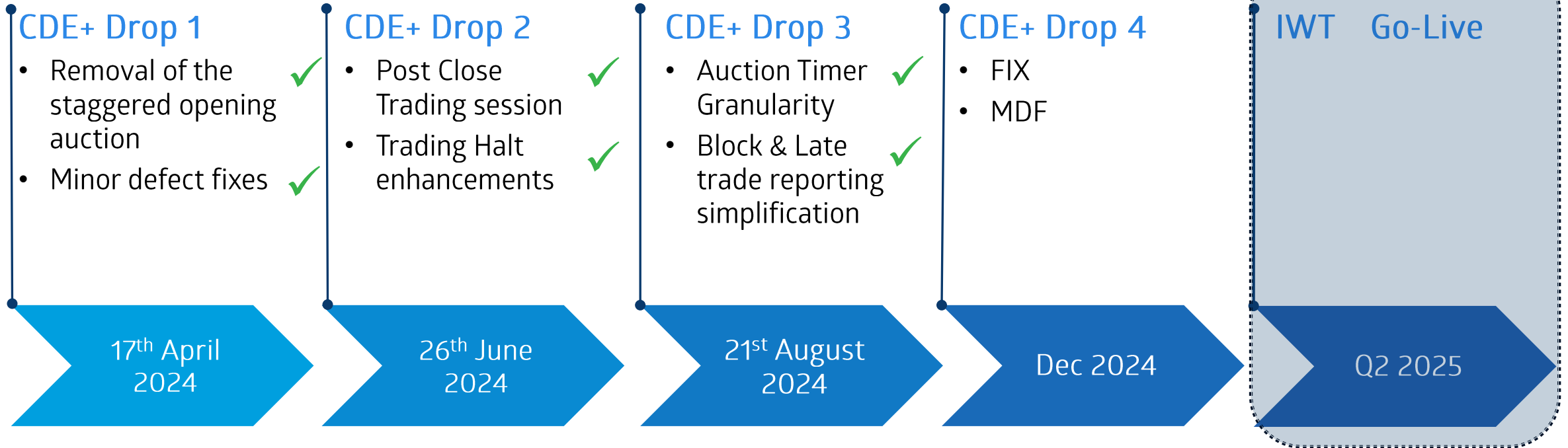
- All mandatory changes are now in CDE+ and available for testing

# CDE+ Roadmap Update



- Initial Specifications for FIX and MDF will be provided in October 2024

# CDE+ Roadmap Update



- Target dates for IWTs and Go-Live provided in Jan 2025

# CDE+ DROP 3 – Functional Updates

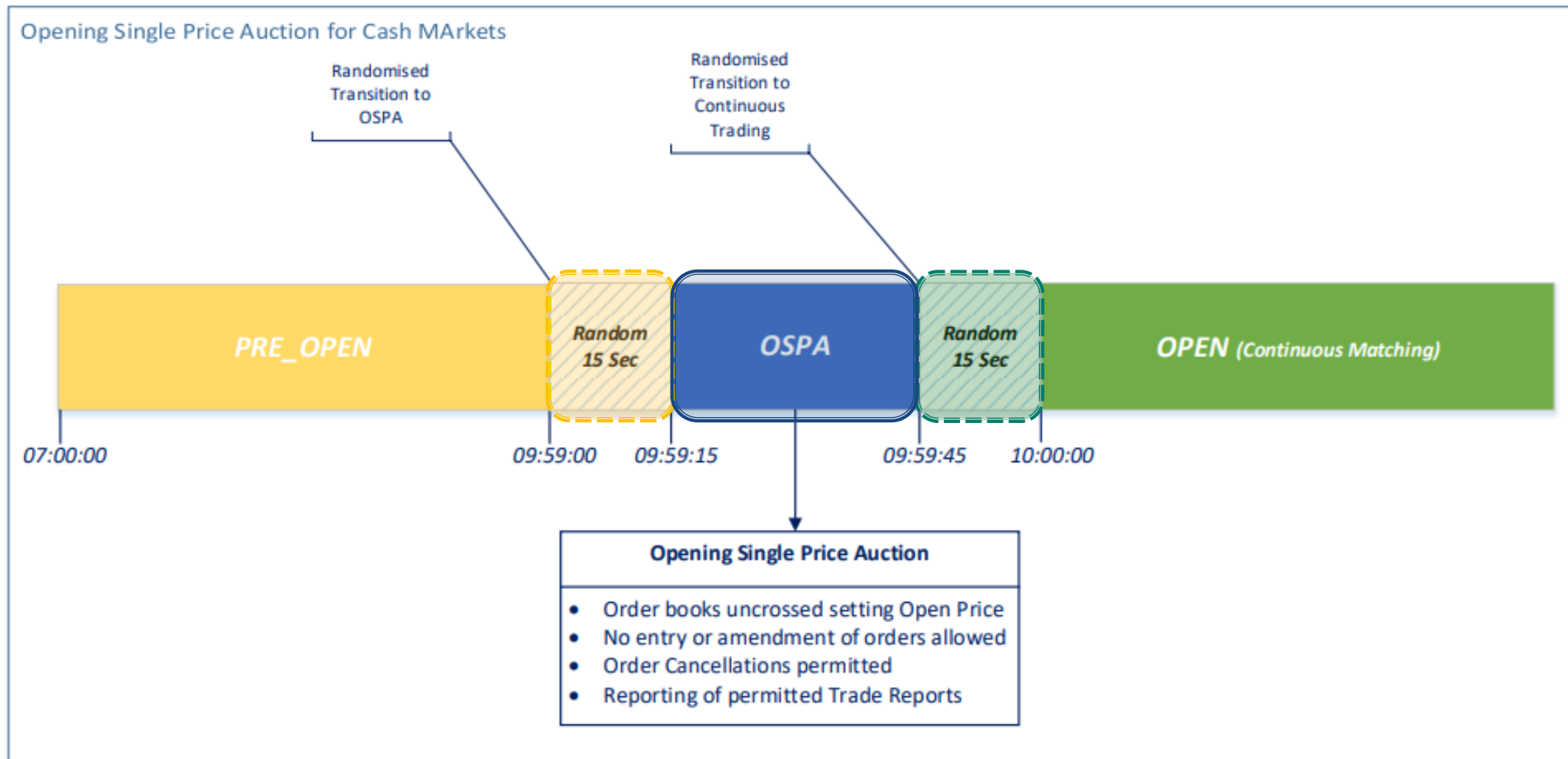
| ASIC Tier | Minimum Block Trade Value | Current ASX Trade Report Code | SR15 ASX Trade Report Code |
|-----------|---------------------------|-------------------------------|----------------------------|
| 1         | \$1 000 000               | S1                            | SC                         |
| 2         | \$500 000                 | S2                            | SC                         |
| 3         | \$200 000                 | S3                            | SC                         |

| Current Trade Report Type | Description  | New Trade Report Type |
|---------------------------|--|-----------------------|
| LT                        | Late Trade   | LT                    |
| LTCT                      | Where a trading participant effects an overnight transaction in a Cash Only Combination  | LT                    |
| L1                        | Genuine Book Squaring – A trade that completes an order received Prior to 16.10 on the day of trading  | LT                    |
| L2                        | Hedging Trades   | LT                    |
| L3                        | Completion of an order that narrowly missed the execution in the CSPA Session State  | LT                    |
| L4                        | Error Rectification  | LT                    |
| L5                        | Put Throughs – a crossing that results in a transaction being sold by a nominee that holds the product on behalf of a fund manager to another nominee that holds Cash Market Products on behalf of the same fund manager | L5                    |

- Block Trade reporting simplification – SC “Special Crossing”
- Late Trade reporting simplification – LTCT/L1/2/3/4 will be LT
- L5 – Put Throughs will remain
- Randomised auction timer granularity moved from seconds to milliseconds
- Cancel On Disconnect disabled for CLOSE session state

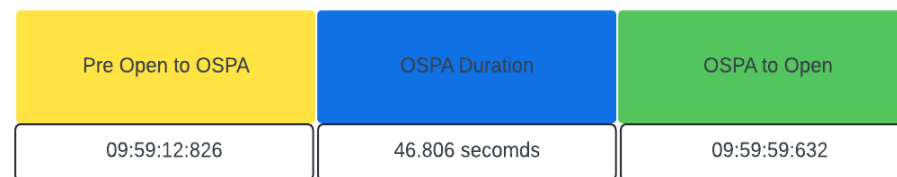
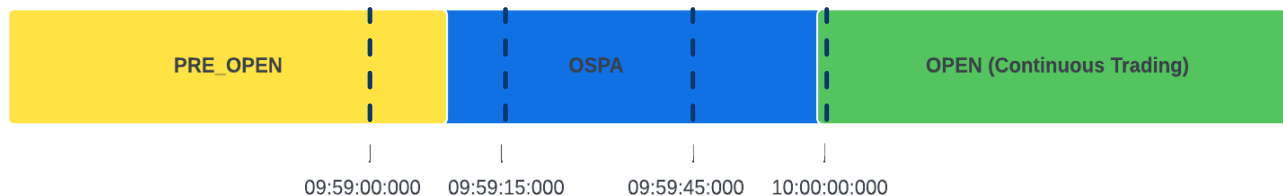
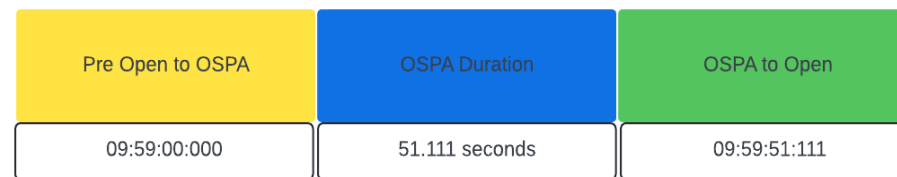
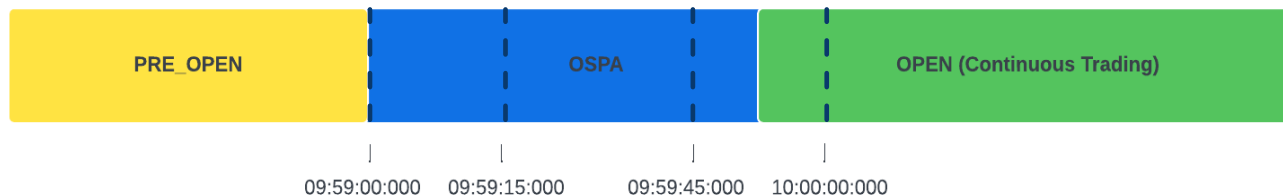
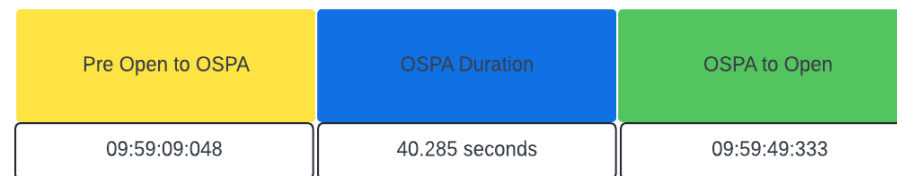
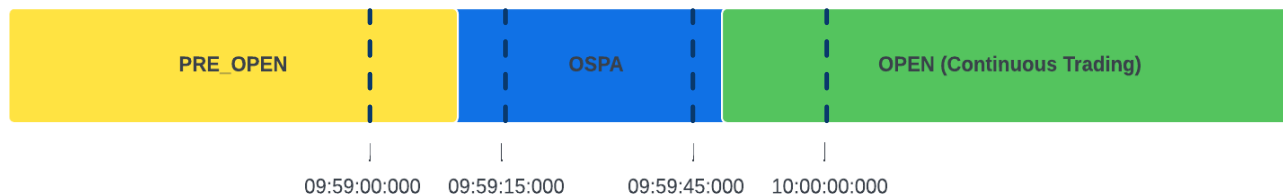
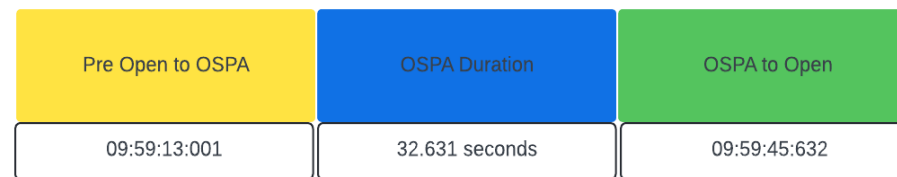
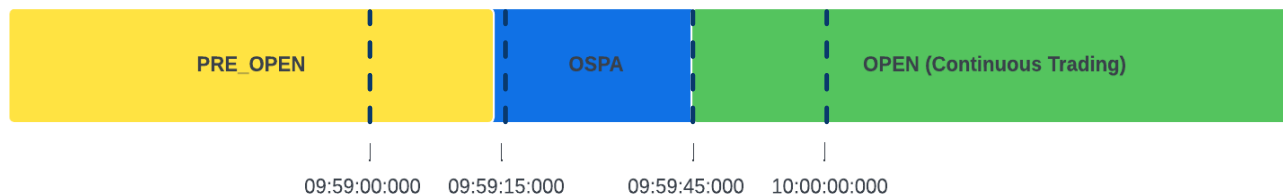
# Review of Opening Auction changes

# Update on Opening Stagger removal



# Opening Stagger Removal – examples

- Earliest OSPA starts 9:59:00:000
- Latest OSPA starts 9:59:15:000
- OSPA is a minimum of 30secs.
- Earliest continuous trading 9:59:45:000
- Latest continuous trading 10:00:00:000
- Time stamp will be milliseconds



# Update on FIX/MDF Functionality



# Overview of FIX Order Entry (OE) and FIX Drop Copy (DC) Functionality



## OE Reference Data

- Market Reference Data
- Security Reference Data



## OE Trade Reports

- Single-Sided Trade Reports
- Dual-Side Trade Reports
- Delayed Trade Reports
- Trade Cancellations



## OE Order Management

- New Orders
- Amend Orders (within a session)
- Cancel Orders (cross session and cross protocol)
- Order status requests



## Quotes

- Quote Requests



## DC Reference Data

- Market Reference Data
- Security Reference Data



## DC FIX Functions

- Trade Capture Reports (Trades)
- Execution Reports (Orders)
- BSP Functionality



## DC Config Options

- Clients will be able to opt into Execution Reports and/or Trade Capture Reports per session



## Portfolio Trade Reports

- Participants will be able to identify all instruments of a Portfolio Special or an ETF Portfolio using FIX tag 24106

# Overview of FIX Order Type Tags

## TradeMatch FIX Order Types and Tags

| ASX ORDER TYPE/VARIATION | FIX Tags required for Order Types     |                                   |                            |                            |                                     |   |
|--------------------------|---------------------------------------|-----------------------------------|----------------------------|----------------------------|-------------------------------------|---|
|                          | Routing<br>ExDestination<br>(Tag 100) | Order Type<br>OrdType<br>(Tag 40) | MAQ<br>MinQty<br>(Tag 110) | Price<br>(Tag 44)          | Instruction<br>ExecInst<br>(Tag 18) | Additional FIX Tags Required  |
| <b>Trade Match</b>       |                                       |                                   |                            |                            |                                     |   |
| Limit                    | ASXT                                  | Limit (2)                         |                            | Required on full tick      |                                     |   |
| Market to Limit          |                                       | Market to Limit (K)               |                            | Null                       |                                     |   |
| Short Sell               |                                       | Limit (2)                         |                            | Req on full tick           |                                     | Side (tag 54) set to Short Sell (5)   |
| Auction Imbalance limit  |                                       | Limit (2)                         |                            | Req for Limit on full tick | Imbalance Only (i)                  |   |
| Icebergs                 |                                       | Limit (2),<br>Market to Limit (K) |                            | Req for Limit on full tick |                                     | DisplayQty (Tag 1138) required  |
| Price Stabilisation      |                                       | Limit (2)                         |                            | Req on full tick           |                                     | OrderRestrictions (Tag 529) set to C  |
| Best Limit               |                                       | Pegged (P)                        |                            | Null                       |                                     | PegMoveType (Tag 835) set to Fixed(1)<br>PegScope (Tag 840) set to Local(1)<br>PegPriceType (Tag 1094) set to Primary Peg (5) |

# Overview of FIX Order Type Tags

## CentrePoint and Sweep FIX Order Types and Tags

| ASX ORDER TYPE/VARIATION  | FIX Tags required for Order Types     |                                   |                            |                                    |                                     |  |
|---------------------------|---------------------------------------|-----------------------------------|----------------------------|------------------------------------|-------------------------------------|--|
|                           | Routing<br>ExDestination<br>(Tag 100) | Order Type<br>OrdType<br>(Tag 40) | MAQ<br>MinQty<br>(Tag 110) | Price<br>(Tag 44)                  | Instruction<br>ExecInst<br>(Tag 18) | Additional FIX Tags Required                     |
| <b>Centre Point</b>       |                                       |                                   |                            |                                    |                                     |  |
| CP Market                 | ASXC                                  | Market (1)                        | Set for Block Order        | Null                               |                                     |  |
| CP Market Single Fill     |                                       | Market (1)                        | Req                        | Null                               | Single execution requested (j)      |  |
| CP Limit                  |                                       | Pegged (P)                        | Set for Block Order        | Required on full tick or half tick |                                     | PegPriceType (Tag 1094) set to Mid-price peg (2) |
| CP Limit Single Fill      |                                       |                                   | Req                        | Required on full tick or half tick | Single execution requested (j)      | PegPriceType (Tag 1094) set to Mid-price peg (2) |
| CP Dark Limit             |                                       | Limit (2)                         | Set for Block Order        | Required on full tick or half tick |                                     |  |
| CP Dark Limit Single Fill |                                       |                                   | Req                        | Required on full tick or half tick | Single execution requested (j)      |  |
| <b>Sweep/Dual Post</b>    |                                       |                                   |                            |                                    |                                     |  |
| Sweep Limit               | XASX                                  | Limit (2)                         | Set for Block Order        | Full Tick                          |                                     |  |
| Sweep Limit Single Fill   |                                       |                                   | Req                        | Full Tick                          | Single execution requested (j)      |  |
| Sweep market to Limit     |                                       | Market to Limit (K)               |                            | Null                               |                                     |  |
| Sweep Dual Posted         |                                       | Limit (2)                         |                            | Half Tick                          |                                     |  |
| Sweep Limit Iceberg       |                                       | Limit (2)                         |                            | Full Tick                          |                                     | DisplayQty (Tag 1138) required                   |

# FIX Cancel On Disconnect (CoD)

## Order Level Control:

- Tag 18 (ExecInst): Used to set CoD functionality on a per-order basis; amendable during all states that allow order modification.

## Disconnection Behaviour:

- **Standard Disconnection:** Orders flagged as CoD are deleted if the FIX session disconnects.
- **Restricted States:** Orders in restricted states (Close, Enquire) are retained; CoD is triggered only on a subsequent disconnection event for the FIX session.

## GTC Orders set to CoD:

- Retained overnight if the session disconnects in the Close Session state or if the connection is forced logged off as part of the overnight processes

## OMNet/OUCH CoD Functionality:

- CoD functionality for the OMNet and OUCH protocols remains unchanged (Session level)

# Overview of MDF Functionality



## Reference Data

- Market Directory
- Orderbook Directory
- Combination Orderbook Directory
- Corporate Actions
- Tick Size Tables



## Event & State Changes

- System Event eg start and end of day messages
- Order Book State changes
- Corporate action updates
- Market Announcements
- News Messages



## Price Information

- Equilibrium Price
- Market by Price (5 levels)
- Trade Statistics
- Reference Price
- Open Interest
- Trade Ticker (incl Off Market)



## Recovery Services

- Glimpse Snapshot
- Gap requests

# Commercials for FIX and MDF

# SR15 Commercial Impacts

ASX recognise with the introduction of new interfaces and protocols, Participants may need to parallel run protocols until OMNet retirement to reduce risk.

During the transition period, our pricing strategy will be designed to be cost-neutral, ensuring that customers can seamlessly migrate to the new services without additional financial burden.

# Network infrastructure changes

Nick Rakebrandt



# Network infrastructure changes

## Connectivity Products

### 1. Colocation

- All connections located in ALC Colocation (Production and CDE/CDE+)
- Cross Connects, layer 3 network services

### 2. ASX Net

- Customer premise, ASX delivered infrastructure
- Dark fibre, secure ASX managed networks
- Independent production Trading Access Network
- ASX Net(MPLS) network access to CDE/CDE+

### 3. Internet VPN

- CDE/CDE+ only, access over Internet VPN

# Network infrastructure changes

## CDE/CDE+

### Colocation Access

- FIX Order Entry gateways will be configured with new Public IP allocations
- New IP destinations and TCP ports will be advertised over existing LCC cross connects
- MDF will be delivered over the existing CDE/CDE+ ITCH access network. Participants can utilise their current CDE/CDE+ LCC connections

### ASX Net

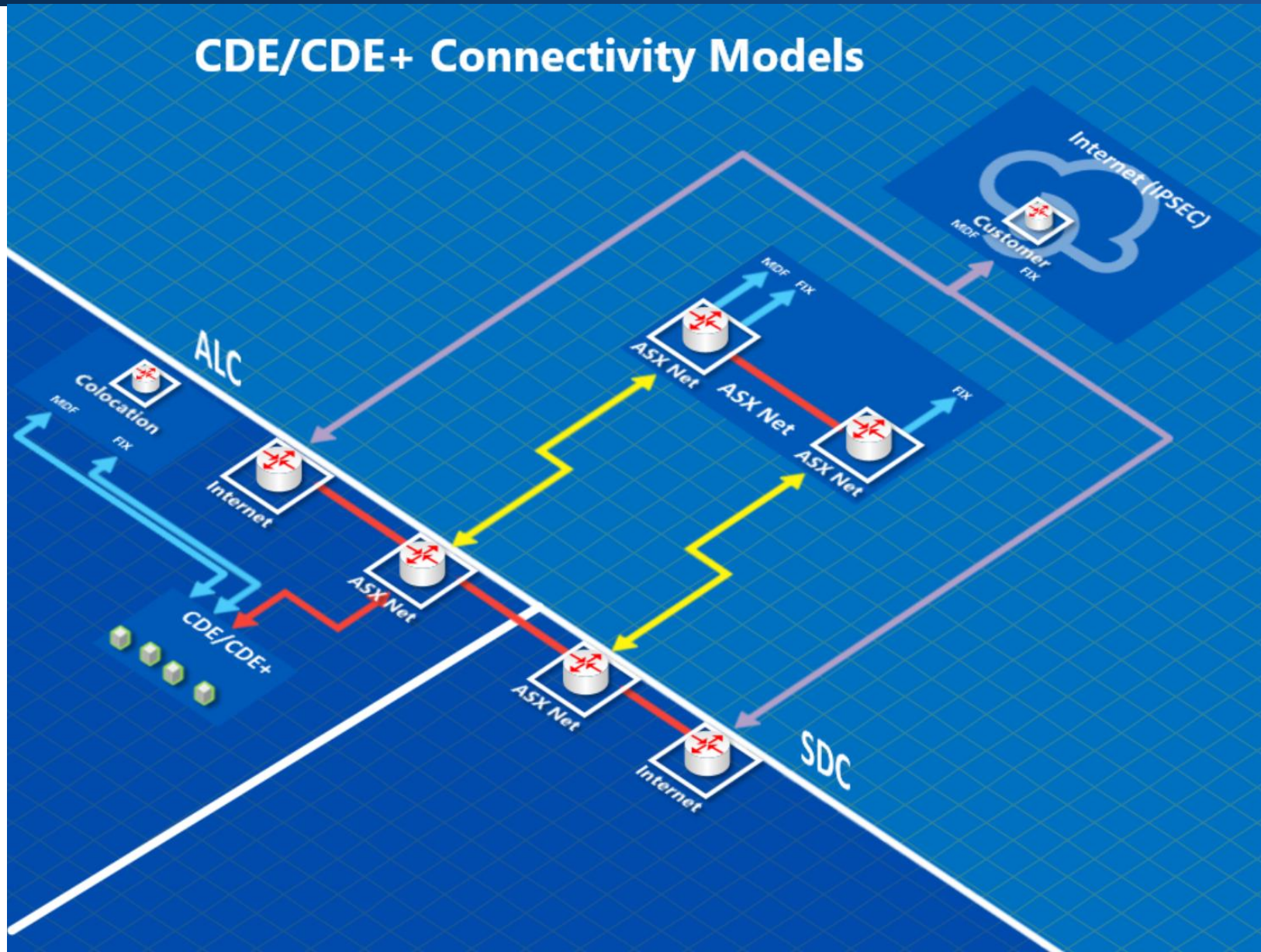
- CDE/CDE+ FIX Order Entry and Drop Copy access will be delivered over the existing ASX Services VRF in the ASX Net network
- CDE/CDE+ MDF will be delivered as new L3 multicast interface over the ASX Net (MPLS) network

### Internet VPN

- VPN access to CDE/CDE+ FIX Order Entry and Drop Copy access will be delivered over the existing CDE/CDE+ site to site VPN tunnels
- CDE/CDE+ MDF will be available via GRE over IPSEC tunnels, utilising the same design as ASX 24 MDP access

# Network infrastructure changes

CDE/CDE+



# Network infrastructure changes

## ALC Colocation

### FIX Order Entry

- FIX Order Entry access will be delivered over existing ASX advertised destination IPs with new FIX TCP port
- New FIX TCP ports will be permitted on order over existing ASX Trade LCC and RTC cross connects

### FIX Drop Copy

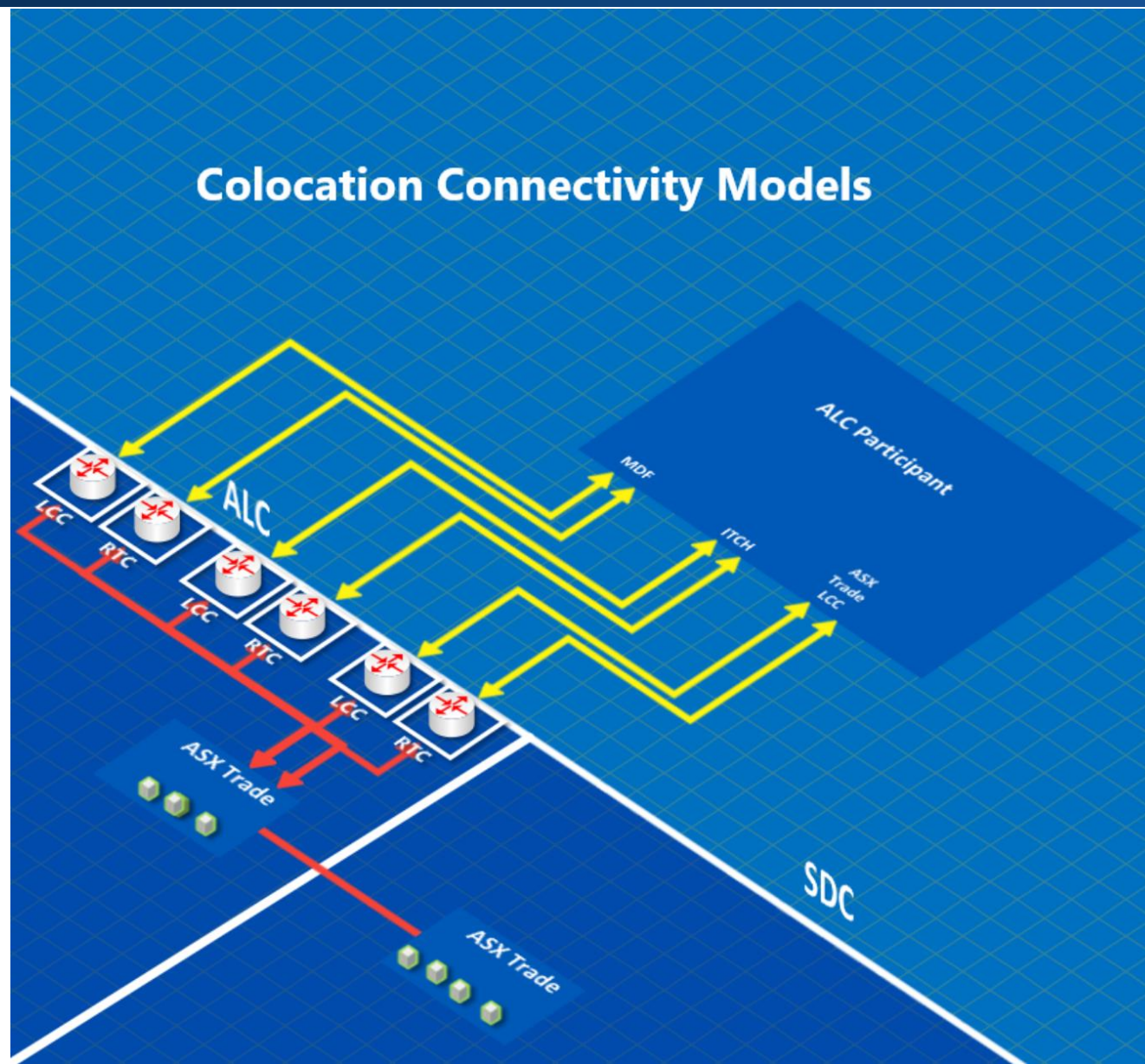
- FIX Drop Copy access will be delivered over existing ASX advertised destination IPs with new FIX TCP port
- New TCP ports will be permitted on order over all existing ASX Trade LCC and RTC cross connects

### ITCH MDF

- ITCH MDF will be delivered over a new access network, independent of ITCH
- Feeds A and B(ALC) and C(SDC) will require new LCC/RTC cross connects
- Configuration of the new multicast feed will follow the same design as existing ITCH feeds (PIM-SM)

# Network infrastructure changes

## ALC Colocation



# Network infrastructure changes

## ASX Net

### FIX Order Entry

- FIX Order Entry access will be enabled over existing ASX Trade CPE server gateways
- New FIX TCP ports will be permitted as per order

### FIX Drop Copy

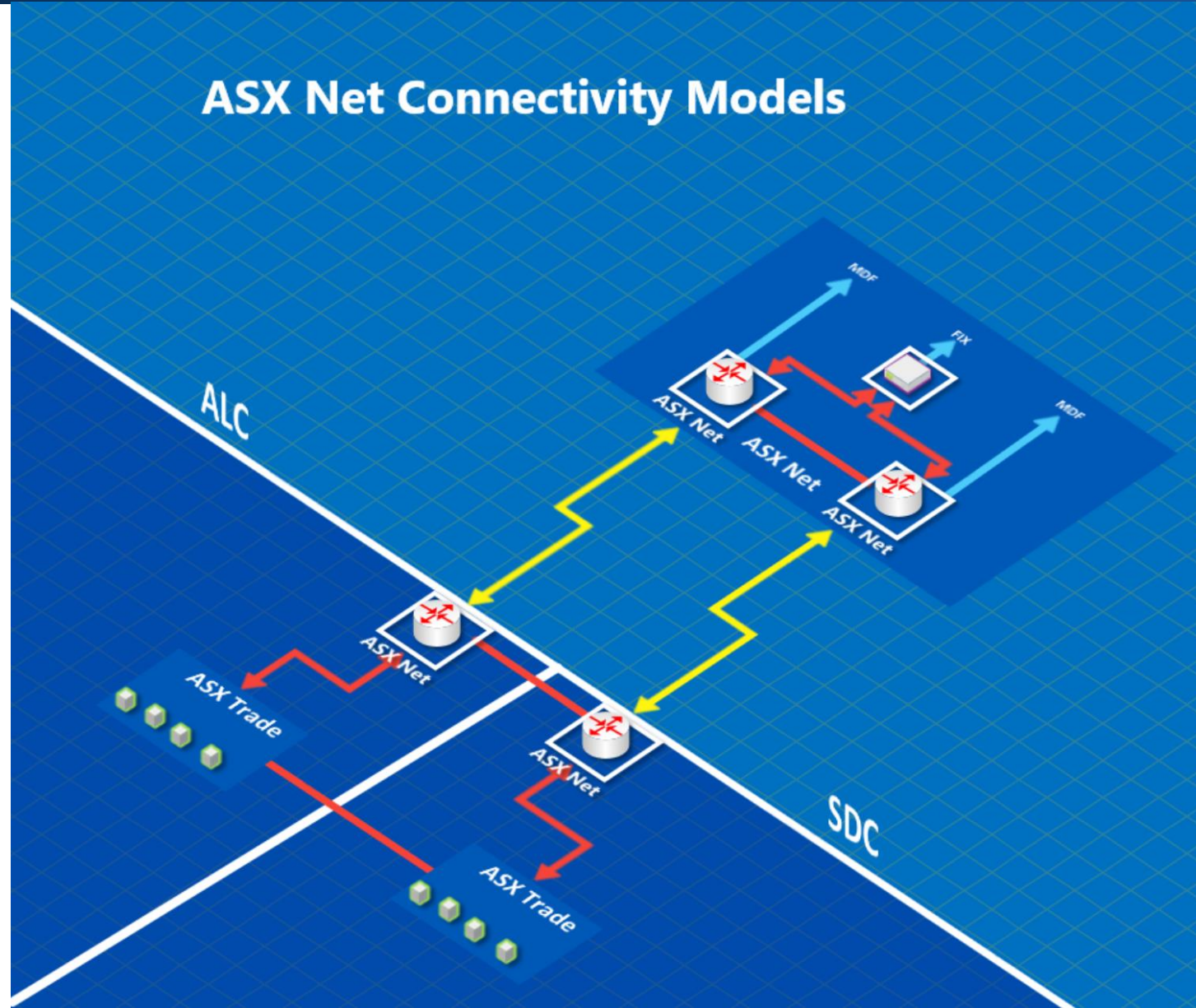
- FIX Drop Copy access will be enabled over existing ASX Trade CPE server gateways
- New FIX TCP ports will be permitted as per order

### ITCH MDF

- MDF will be delivered over existing trading network CPE
- Feeds A(ALC) and C(SDC) will require new 1Gb Copper customer connections to trading network CPE
- Configuration of the new multicast feed will be a layer 3 access model (PIM-SM)

# Network infrastructure changes

ASX Net



# Proposed network infrastructure changes

## ASX Trade Connectivity Products Update

### 1. Colocation

- Colocation network refresh planned to be delivered as a greenfields environment, completely segregated from the existing platform connectivity.
- Greenfields connectivity will require new physical cross connects for each service
- Expect further communications Q2 CY25

### 2. ASX Net

- Refresh of the Trading WAN CPE, kick off communications expected Q1 CY25
- ASX Trade server gateways will remain in-situ for SR15 OMNet
- ASX Net Global refresh will require new cross connects to participants located in ASX POPs

### 3. Internet VPN

- CDE/CDE+ only, access over Internet VPN



# Next Steps

# Equity Market Working Group – Next Steps



Begin / continue developing and testing of delivered mandatory features available in the CDE+



Prepare to review the new protocol specifications for FIX OE, FIX DC and MDF – October 2024



Consider your transition plan from OMNet to FIX and MDF protocols



Begin to plan for IWT test participation, and conformance testing for new protocols



Talk to your teams, your clients, your brokers, your data vendors

# Equity Market Working Group – Next Steps

- Ongoing updates with stakeholders with additional details on timelines & scope
- Annual Tech & Operations Forum to be held on 5th Dec 2024
- Contact your Technical Account Manager
- ASX Customer Technical Support
  - 1800 663 053
  - +61 2 9227 0372
  - [cts@asx.com.au](mailto:cts@asx.com.au)
- For any other enquiries, please email [equities@asx.com.au](mailto:equities@asx.com.au)

# Equity Market Working Group – Next Steps

- ASX Equity Markets Working Group web page can be found [Here](https://www.asx.com.au/markets/trade-our-cash-market/equity-market-working-group)  
<https://www.asx.com.au/markets/trade-our-cash-market/equity-market-working-group>

The image shows a screenshot of the ASX website's navigation menu. The 'MARKETS' dropdown menu is open, and the 'Equity Market Working Group' link is highlighted in yellow. A red circle labeled '1' is around the 'MARKETS' dropdown arrow, and another red circle labeled '2' is around the 'Equity Market Working Group' link. A larger inset on the right shows a detailed view of the 'Equity' section of the website, with the 'Equity Market Working Group' link also highlighted in yellow and circled in red.

ASX

MARKETS

CONNECTIVITY AND DATA

LISTINGS

ISSUERS

PARTICIPANTS

INVESTORS

TRADE OUR CASH MARKET

Cash market prices

Today's announcements

Historical announcements

Company directory

Dividend search

ASX investment products directory

Australian equities trading

Australian Cash Market Report

Equity Market Working Group

TRADE OUR DERIVATIVES MARKET

Derivatives market prices

Futures market trading

Equity options market trading

CLEARING AND SETTLEMENT SERVICES

ASX Clear

ASX Clear (Futures) | Clearing and Settlements

OTC Clearing

ASX Settlement

Austraclear

ASX Collateral

CHES5 Replacement

Stakeholder Engagement

Equity

TRADE OUR CASH MARKET

Cash market prices

Today's announcements

Historical announcements

Company directory

Dividend search

ASX investment products directory

Australian equities trading

Australian Cash Market Report

Equity Market Working Group

MARKET RESOURCES

ISIN Services

ASX fees

ASX codes and descriptors

Market maker arrangements

System status

Incident Management

Trading hours and calendars

Purpose

The ASX Equity Market Working Group is engaged with the Trade platform.

# Next Steps



1 March 2024

WATCH RECORDING

PRESENTATION

FAQ'S

## Project documentation

Name

SR 15 bug fixes and known issues

Removal of staggered opening rotation

## Project documentation

Name

Block and Late Trade Reporting Guide

Post close trading session guide

SR 15 bug fixes and known issues

Trading halt improvements guide

Removal of staggered opening rotation

- All Equity Market Working Group recordings will be available to review
- Presentations will be available to download
- FAQ page on all aspects on SR15 is available and will be regularly updated
- All project documentation will be made available



ASX

# QUESTIONS

Want to know more?

[Equities@asx.com.au](mailto:Equities@asx.com.au)

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