

New Trading Platform Update Forum

24 June 2020



SETTING THE GLOBAL STANDARD



Housekeeping

- **Questions** – please submit any questions you have throughout the webinar using the Q&A function. If given the option, please direct your question to “*All panellists*” rather than any individual speaker. We will do our best to answer all questions, but will respond directly to you with the answer to any we don’t have time for
- **Slides** – slides will be distributed to everyone by email after the session
- **Recording** – this session is being recorded, and the recording will be shared with attendees after the event should you wish to share with colleagues who were unable to join today
- **Follow-up** – if you have any questions that you’d like to discuss with one of the team directly, please reach out at newtradingplatform@lme.com

Overview

Update on the LME new trading platform initiative

Features of the LME's strategic initiative to rebuild its electronic trading infrastructure:

- An all-new and fully rebuilt LMEselect (v10)
- An all-new and fully rebuilt LMEsource (v4)
- New GUI for trading and administrative functions
- New FIX and binary interfaces

This update forum will cover:

- Market design
- Trading GUI
- Market data
- Customer testing
- Market migration
- Next steps and timeline

Please note, the following slides contain a number of dates and timelines that are based on the latest information. Any changes to these dates/timelines will be communicated via the methods described at the end of this presentation.

Application versions

Summary of the current and future application version numbers

Trading venue	Current trading platform	Future trading platform	Current market data platform	Future market data platform
Electronic	LMEselect (v9)	LMEselect (v10)	LMEsource (v3) LMEselectMD	LMEsource (v4)
Ring			LMEselectMD	LMEsource (v4)
Inter-office			LMEselectMD	LMEsource (v4)

Market design

Market design – key features and external impacts

New trading platform initiative involves a number of changes that will impact market participants

New LMEselect (v10) offering enhanced functionality

New FIX 5.0 interface (replaces current FIX 4.4 interface) offering convenience of industry standard interface

New binary interface offering reduced latency

New market design based on market partitions offering predictable latency and scalability

New trading GUI application offering improved distribution

New LMEsource (v4) providing market data pertaining to the Ring, inter-office and electronic trading venues – replaces the current LMEselectMD and LMEsource (v3)

Market design – market partitions

Market partitions offering performance, predictable latency and scalability

Order management

Each partition gateway (binary protocol) offers direct high performance access to a single ME partition

Order management

Convenience gateways (FIX 5.0) offer single connection access to all markets

Risk management

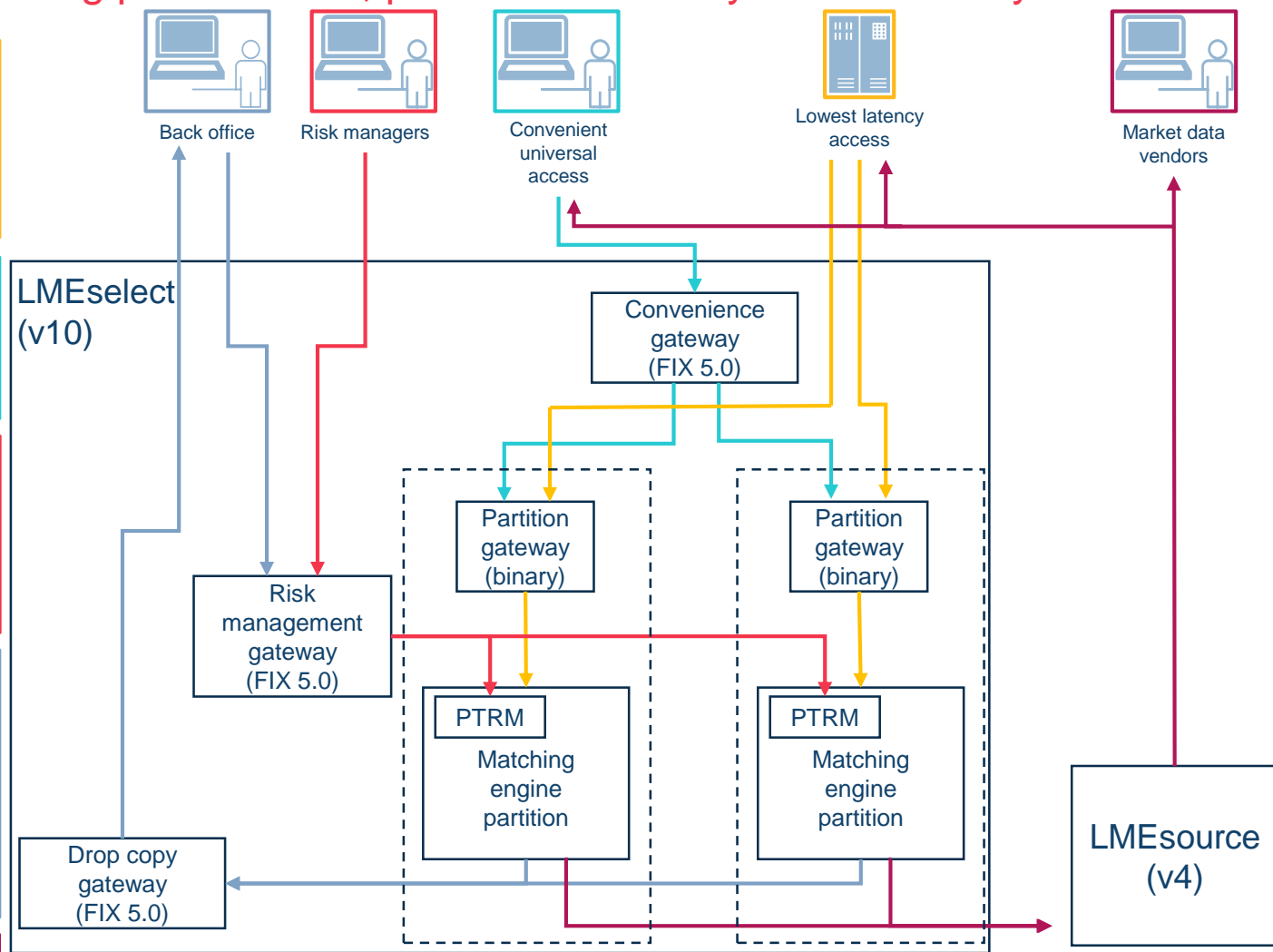
Single risk management gateways (FIX 5.0) offer configuration of PTRM for each partition

Back office

SEP and MMP configuration across all markets
Single drop copy gateways (FIX 5.0) deliver FIX execution reports across all markets

Market data

LMESource (v4) provides data access across all markets

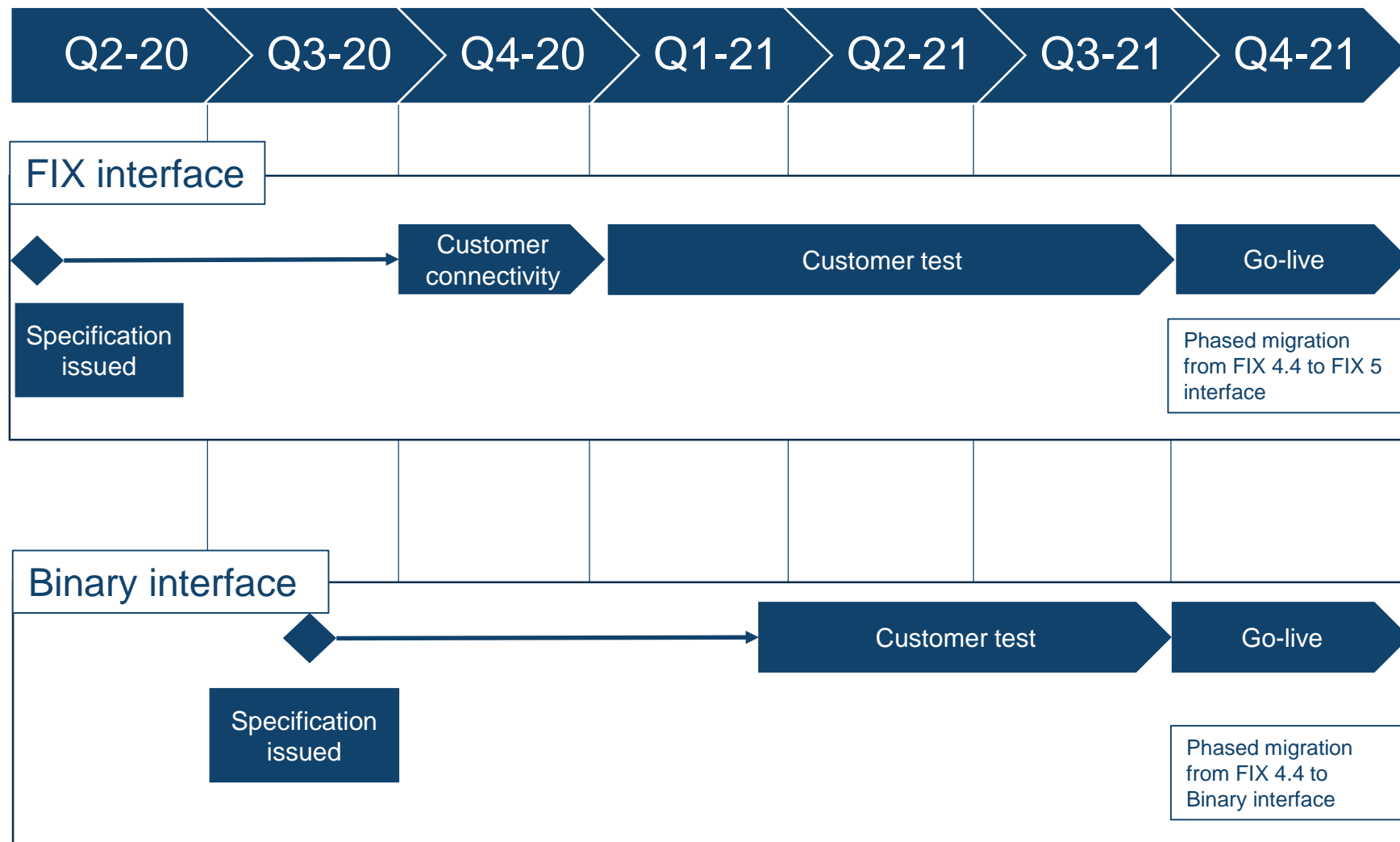


LMEselect (v10) – FIX and binary interfaces

LMEselect (v10) will support both FIX 5.0 and binary interfaces

	FIX 5.0	Binary
Principles	Aligned with FIX principles Minimise use of custom tags	Proprietary protocol, based on the existing HKEX cash binary interface Specifically designed to reduce latency
Convenience gateway	Yes (excluding mass quotes)	No
Partition specific gateway	No	Yes (including mass quotes)
Drop copy gateway	Yes	No
Risk management gateway	Yes	No
Specifications	Issued: December 2019 Updated: April 2020	To be issued: Q3 2020
Test Service Availability	Q1 2021	Q2 2021

LMEselect (v10) – timeline



Trading GUI

Trading GUI – overview

The LME will partner with Trading Technologies to provide the front-end interface for LMEselect (v10)



Lowering barriers to entry

- Advanced browser-based trading GUI
- Mobile access for Android and iOS (if permissioned by member)



Broadening participation in our market

- Direct access to clients and members
- Access to all LME products



Enhancing the user experience

- Rich feature set including options trading functionality and RFQs
- Customisable layout that persists through upgrades

Please note: The new trading GUI will initially be provided on the current LMEselect (v9) to support user familiarisation and early adoption

Trading GUI – key features

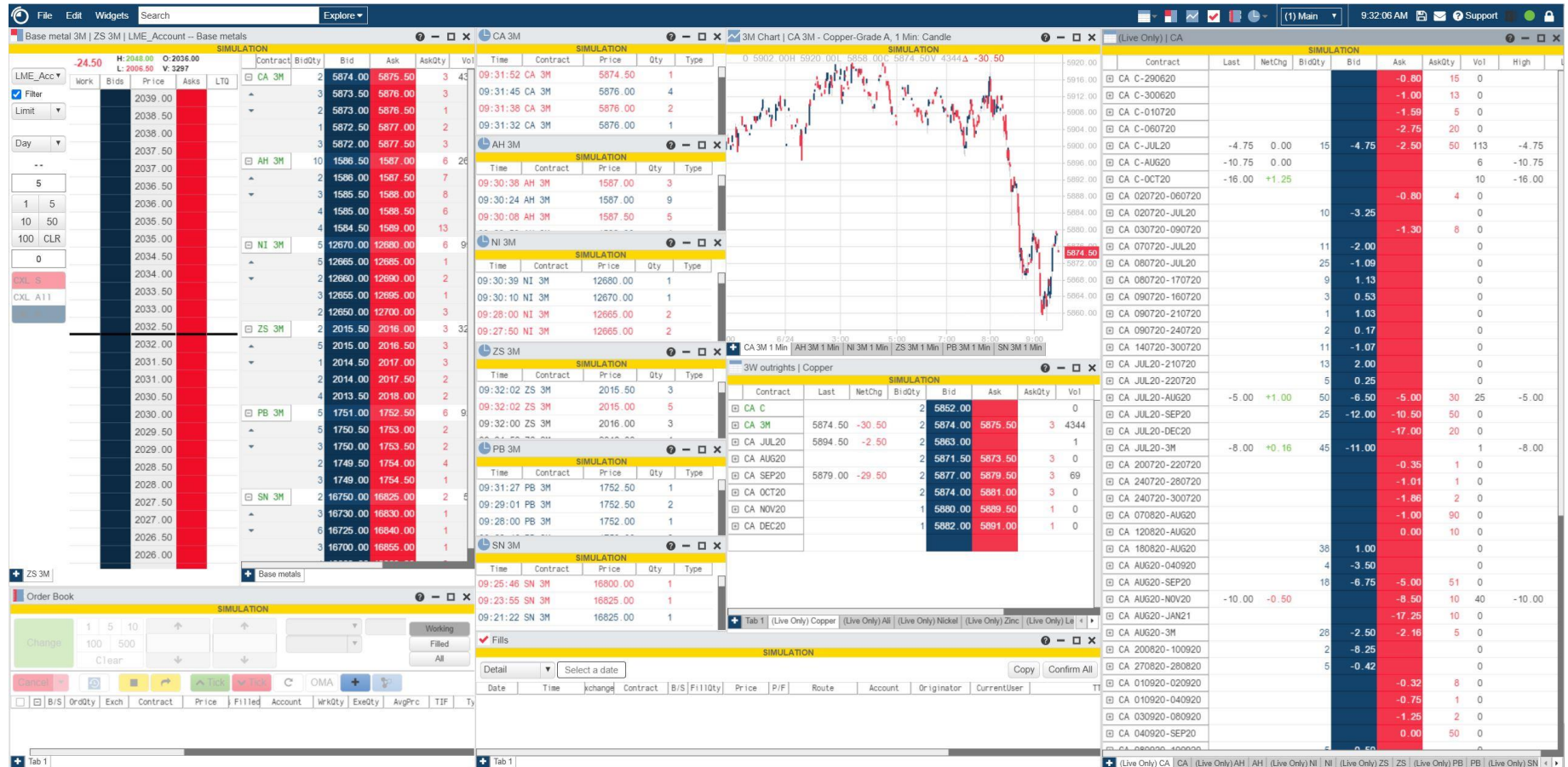
Summary of features provided by the new trading GUI

Access	Market data	Order entry	Order book management	Premium quoted options	Risk management
Browser-based access for Chrome, Firefox and Edge	Charting and analytics	Single click order entry	Intra-day strategy creation	Trade premium quoted options	PTRM configuration
Mobile access for Android and iOS		Market depth ladder	Broken date spreads	“On the fly” options strategy creation	Market maker protection
Wider distribution with direct access for members and their clients		Trade the entire LME product suite	Enhanced merged order books	Submit and subscribe to RFQs	Self execution prevention
Pre-defined, customisable & sharable workspaces					Kill switch

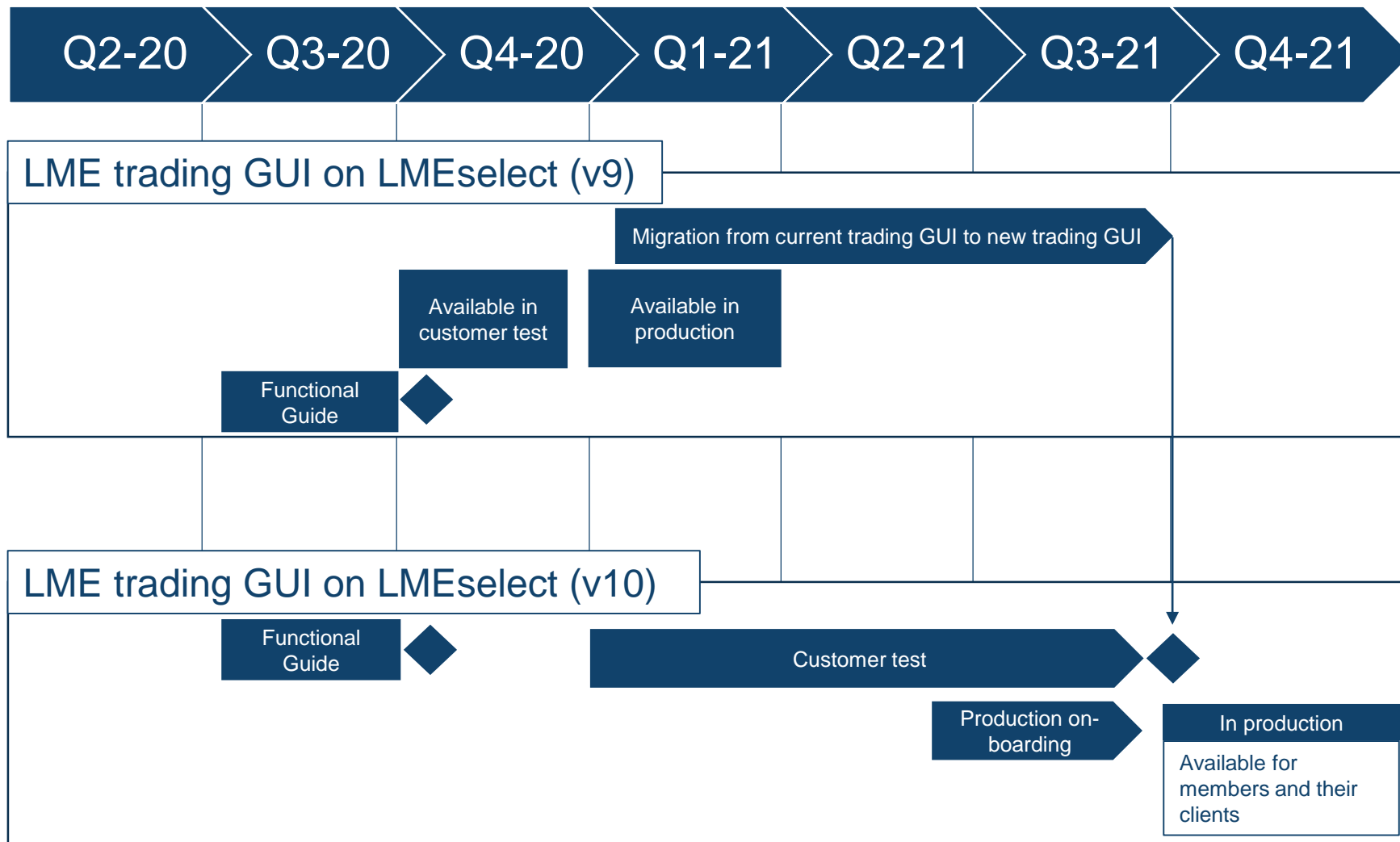
Key:

- Supported on LMEselect (v9) and LMEselect (v10)
- Supported on LMEselect (v10) only

Trading GUI – prototype screen shot



Trading GUI – timeline



Market data

Market data – electronic trading

All new and fully re-built version of LMEsource (v4) to support LMEselect (v10)

Key features:

- All functionality offered by LMEselect (v10)
- Orders and trades available together in the same market data channel
- Separate channels for options and futures
- RFQ details to be included in the order and trade channel
- Reference data, providing a full list of securities/tradeable instruments
- Publication of ISINs in the reference data channel
- Level 3 product: new order-by-order events published from the electronic market

Key dates:

- Client Interface Specification issued Q2 2020
- Test service available from Q1 2021

Please note: The current LMEselectMD & LMEsource (v3) platforms will not support LMEselect (v10) and will be decommissioned.

Market data – non-electronic trading

All new and fully re-built version of LMEsource (v4) will provide Ring and inter-office market data

Key features:

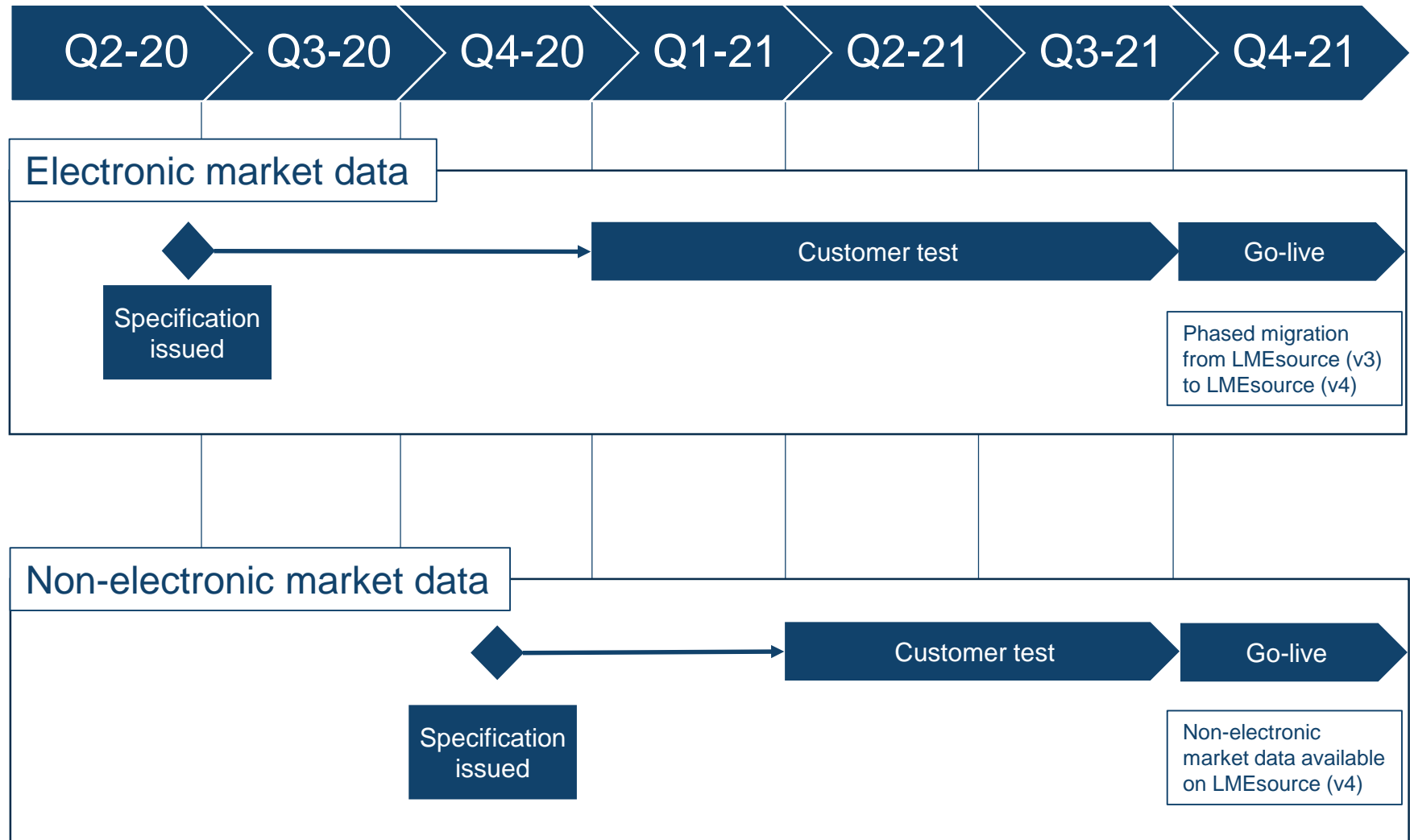
- Offer equivalent non-electronic market data for:
 - LME reference prices (eg LME Official Prices, LME Closing Prices, LMEbullion prices)
 - Inter-office and Ring orders and trades
 - Inter-office and Ring reference data
 - Trading volume data
 - Warehouse stock data
 - Risk data (e.g. EOI, MOI and Futures Banding)
 - ISIN data provided

Key dates:

- Client Interface Specification issued Q4 2020
- Test service available from Q2 2021

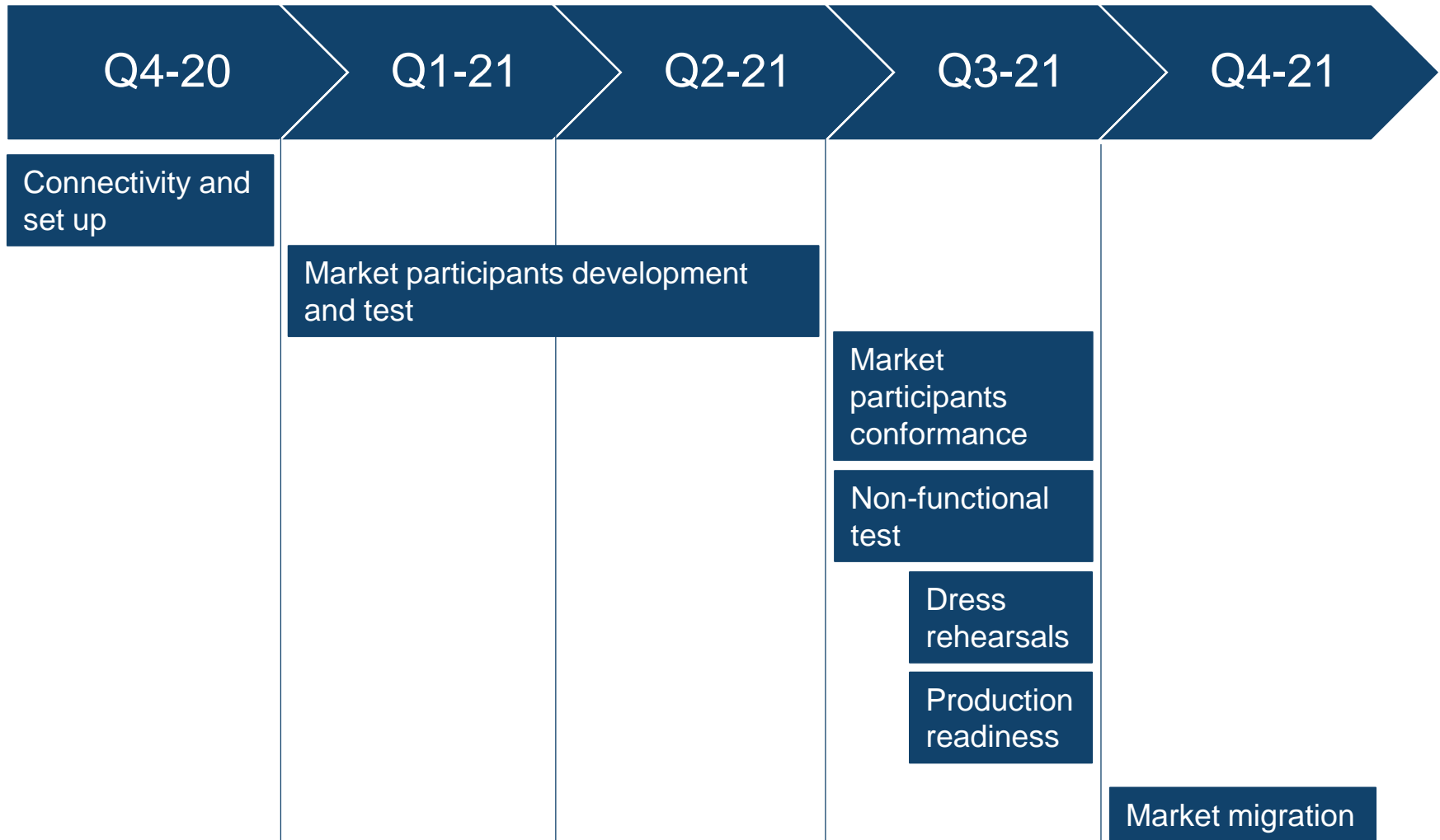
Please note: The current LMEselectMD will be decommissioned as part of the migration to LMEselect (v10).

Market data – delivery roadmap



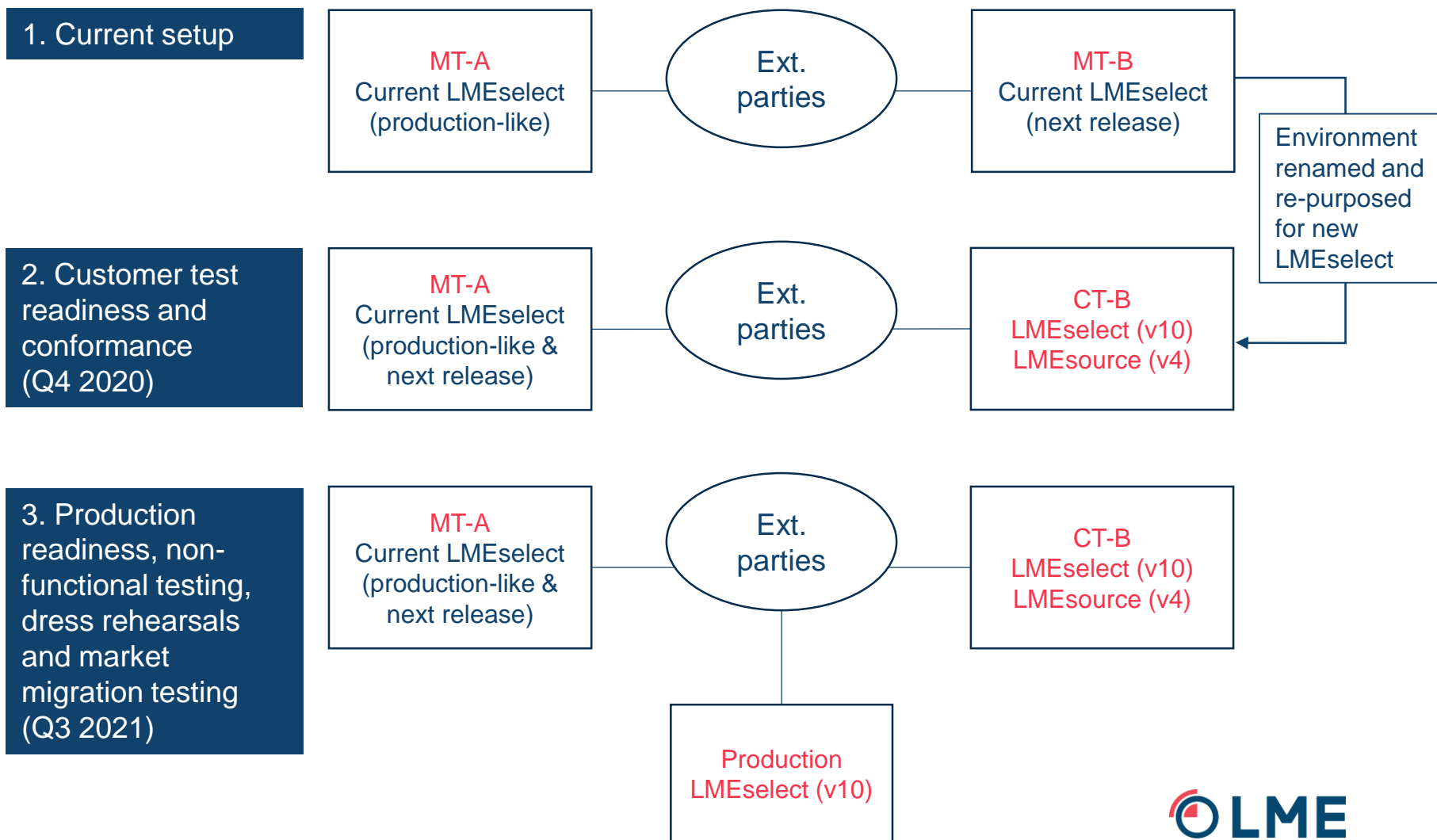
Customer testing

Customer test – high-level plan



Customer test – environments

Existing MTB environment to be used for customer testing



Market migration

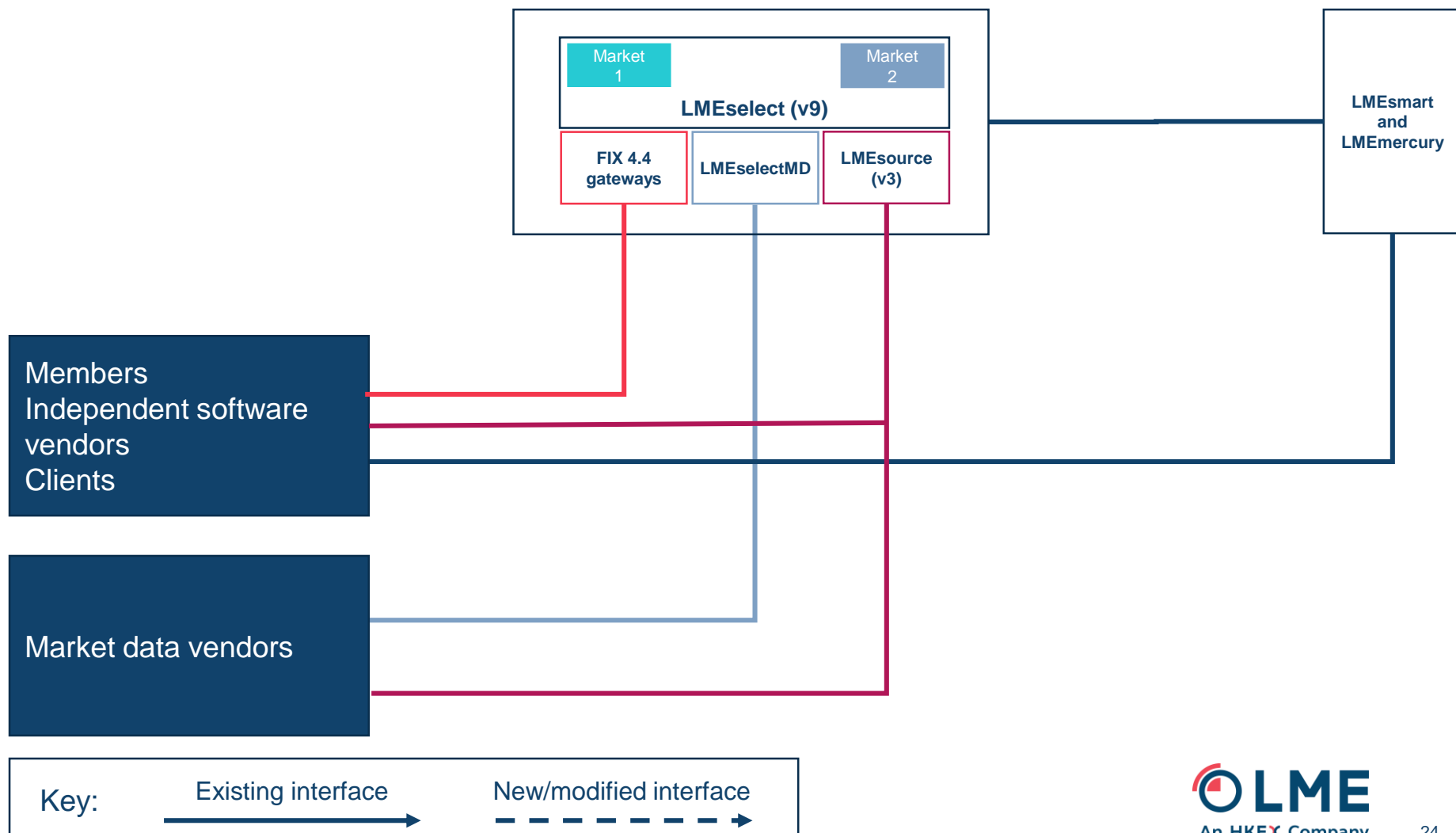
Migration approach

Migration approach proposal for discussion

- To minimise migration risk from LMEselect (v9) to the new LMEselect (v10) the LME is proposing a phased migration
- Migration phases will be product based
- It is assumed migration will consist of two phases, with a short period between each
- Each migration phase will be “big bang” – no provision for backwards/forwards compatibility
- LME will assist participants with their migration preparation including:
 - Regular communication updates
 - Early visibility of technical specifications
 - Six-month (minimum) test window including dev/test, conformance, end-to-end
 - All migration phases to be rehearsed in a customer test environments

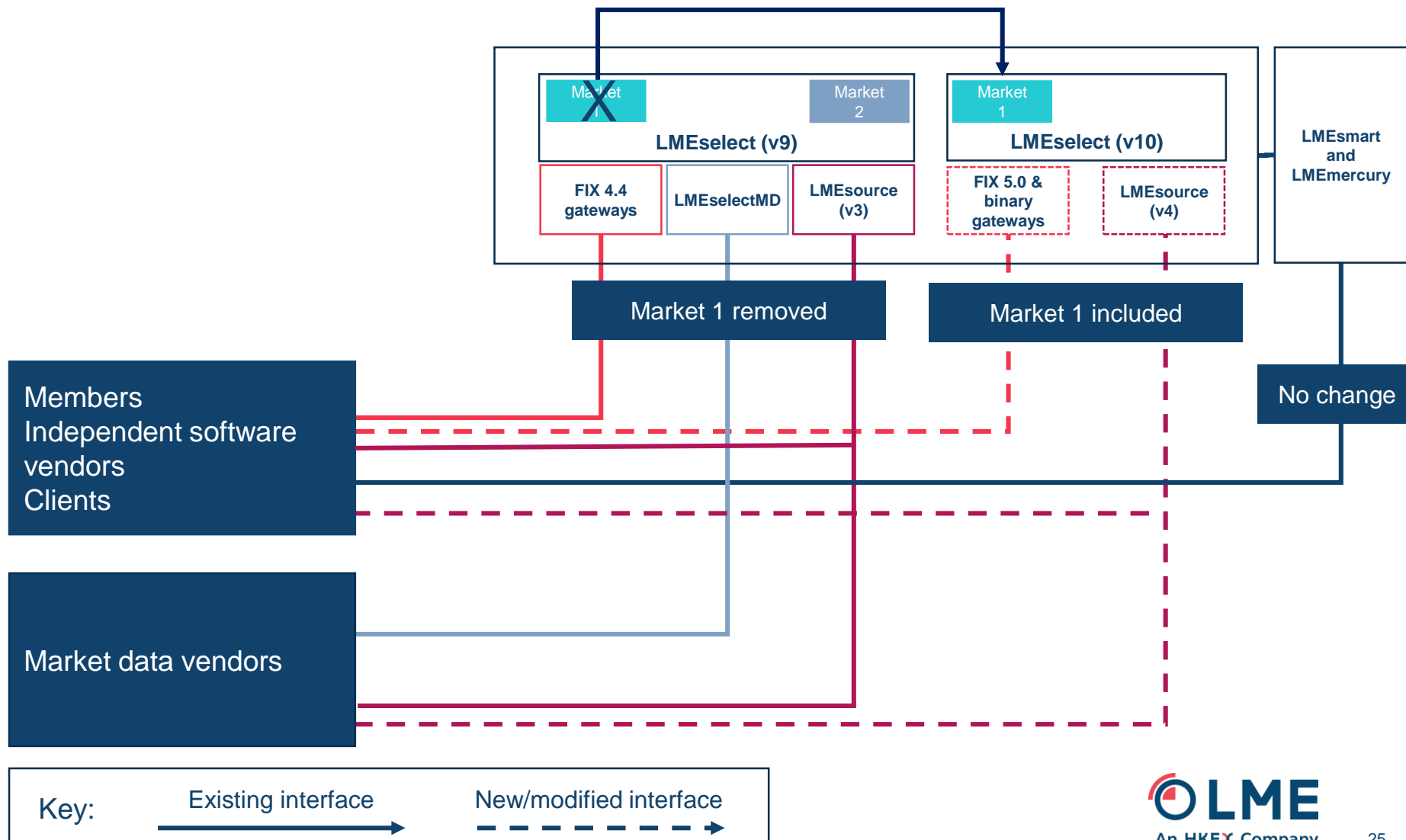
Migration approach

Step 1: Current state



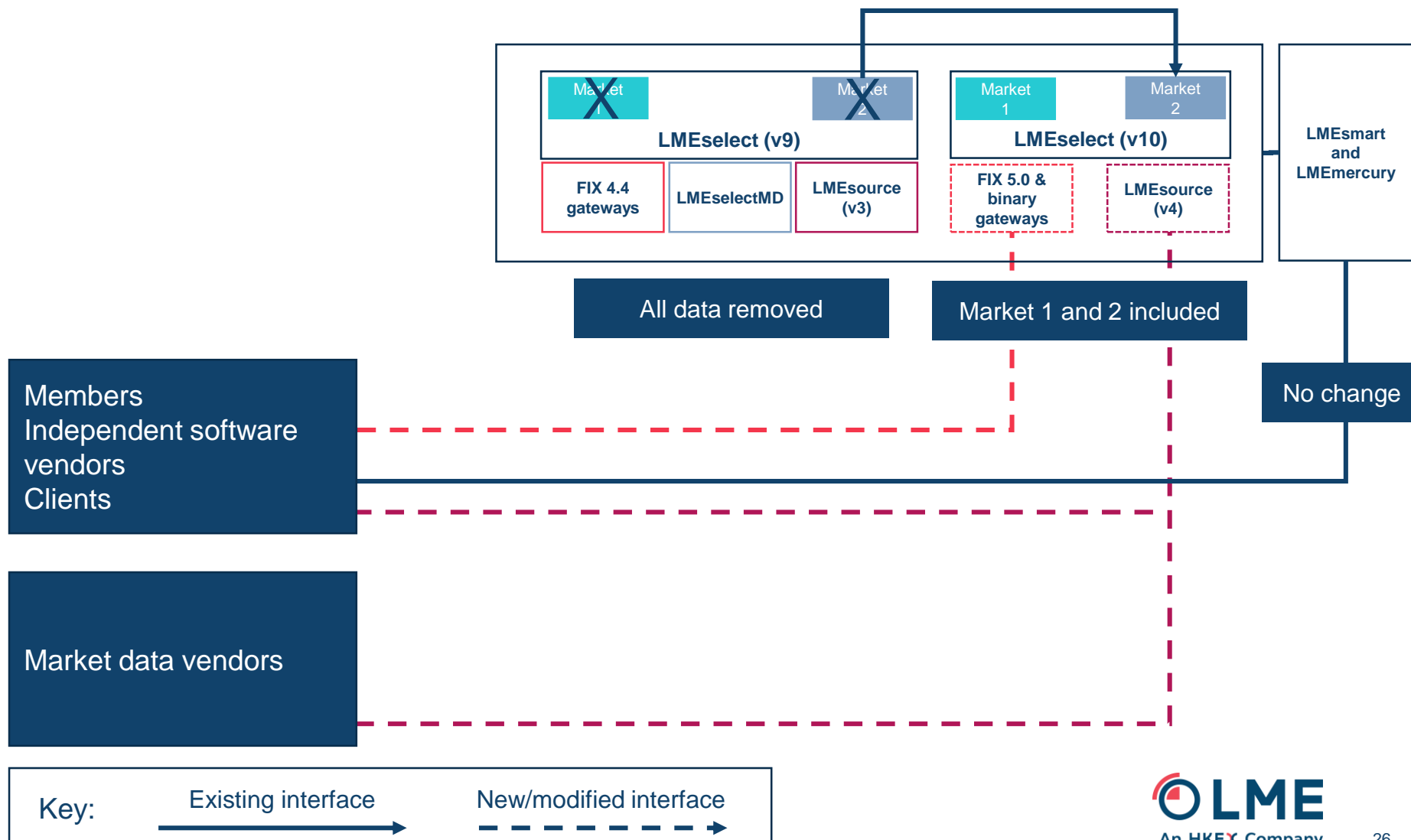
Migration approach

Step 2: Product migration (market 1)



Migration approach

Step 2: Product migration (market 2)



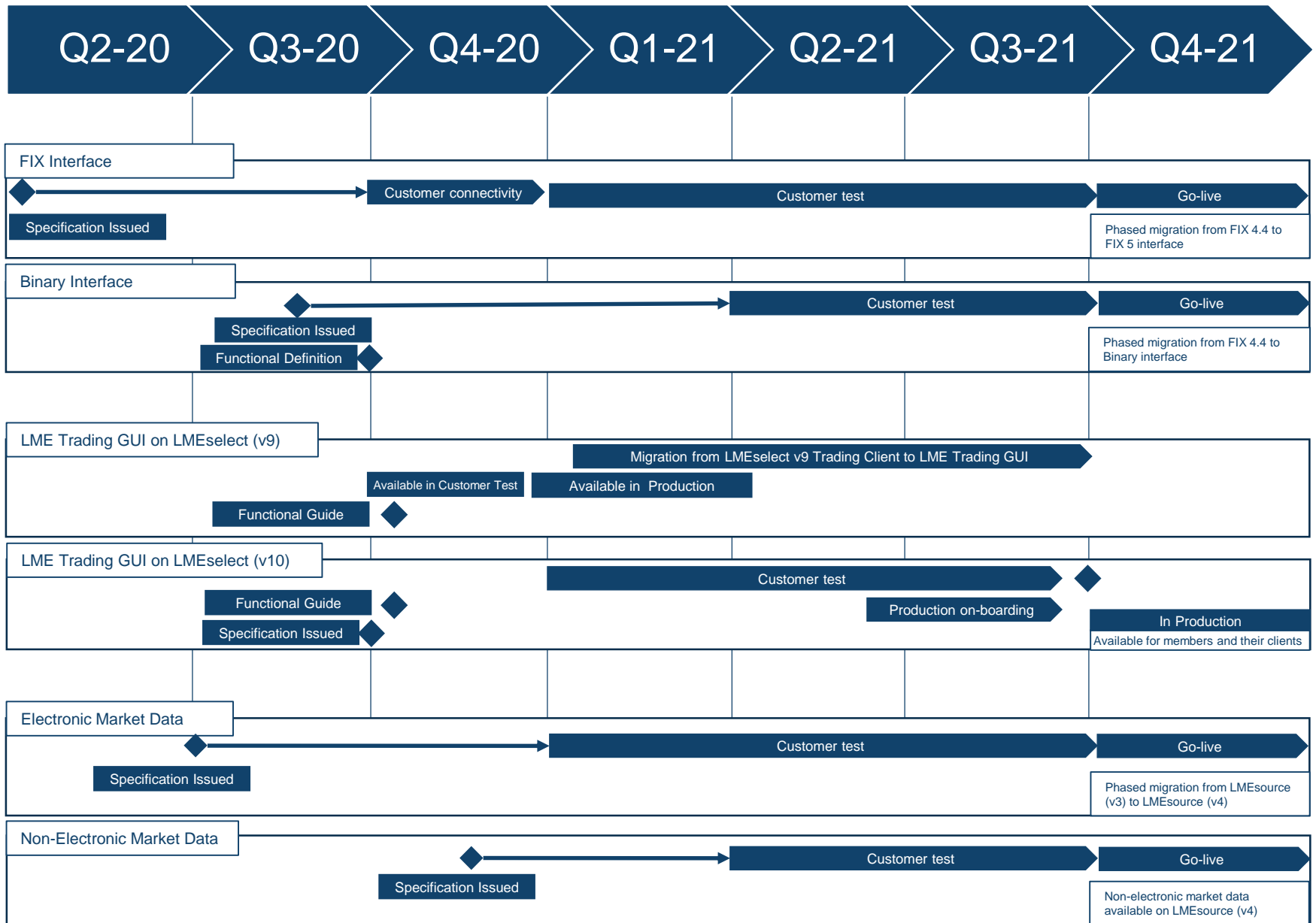
Next steps and timeline

Next steps

New trading platform initiative involves a number of changes that **will** impact market participants

External impacts:	Participant next steps:	Due Date:
Member and vendor testing	Line up development and testing resources Assign Project Manager/Point Of Contact	Now
New FIX 5.0 interface	Provide feedback on the LMEselect (v10) FIX 5.0 specification	Now
New market data offering - LMEsource (v4) replacing LMEselectMD & LMEsource (v3)	Provide feedback on the LMEsource (v4) client interface specification for electronic market data	Now
LMEselect (v10) will offer enhanced functionality	Provide feedback on the LMEselect (v10) Functional Definition	Q3 2020
New binary interface	Provide feedback on the LMEselect (v10) binary interface specification	Q3 2020
New trading GUI application	Provide feedback on the new trading GUI specification	Q4 2020
New market data offering - LMEsource (v4) replacing LMEselectMD & LMEsource (v3)	Provide feedback on the LMEsource (v4) client interface specification for non-electronic market data	Q4 2020

High-level timeline



Communications framework

Communications framework established providing regular and ad-hoc updates

Member/vendor meetings

- Individual member/vendor meetings to be scheduled
- Please assign a Project Manager/Point Of Contact for LME to liaise with

Ad-hoc queries

- Any questions related to the new trading platform can be submitted via the newtradingplatform@lme.com inbox

Regular updates

- Regular updates will be posted onto the LME web site

Specifications

- LMEselect (v10) Binary interface specification to be issued Q3 2020
- LMEselect (v10) Functional Definition to be issued Q3 2020
- LME Systems Connectivity Guide to be issued Q3 2020
- LMEsource (v4) Client Interface Specification for non-electronic to be issued Q4 2020
- Trading GUI functional guide due to be issued Q4 2020

Update forum

- Next forum scheduled for Q4

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