



# **MATCHNow Technology Migration Client Conference Call**

May 11, 2021



## Welcome and Overview

**Chris Isaacson**, *Executive Vice President and Chief Operating Officer*

**Bryan Blake**, *Vice President, Head of Canadian Equities*



## Integration Overview

**Troy Yeazel**, *Senior Vice President, Operations*



## Questions & Answers

**Vince Poil**, *Director, Canadian Equities Product Management*

**Dave Nolan**, *Manager, Canadian Equities Trade Desk*

**Steven Flaming**, *Director, Canadian Equities Sales*

**Cole Chmielewski**, *Vice President, Operations*

**Phillip Cockrell**, *Director, Network Operations*

**Adel Sarhan**, *Senior Director, BIDS Trading Product Management*

**Eric Crampton**, *Executive Vice President and Chief Technology Officer*

# Cautionary Statements Regarding Forward-Looking Information



This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve a number of risks and uncertainties. You can identify these statements by forward-looking words such as “may,” “might,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “potential” or “continue,” and the negative of these terms and other comparable terminology. All statements that reflect our expectations, assumptions or projections about the future other than statements of historical fact are forward-looking statements. These forward-looking statements, which are subject to known and unknown risks, uncertainties and assumptions about us, may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from those expressed or implied by the forward-looking statements.

We operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible to predict all risks and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Some factors that could cause actual results to differ include: the impact of the novel coronavirus (“COVID-19”) pandemic, including changes to trading behavior broadly in the market; the loss of our right to exclusively list and trade certain index options and futures products; economic, political and market conditions; compliance with legal and regulatory obligations; price competition and consolidation in our industry; decreases in trading and clearing volumes, market data fees or a shift in the mix of products traded on our exchanges; legislative or regulatory changes; our ability to protect our systems and communication networks from security risks, cybersecurity risks, insider threats and unauthorized disclosure of confidential information; increasing competition by foreign and domestic entities; our dependence on and exposure to risk from third parties; fluctuations to currency exchange rates; our index providers’ ability to maintain the quality and integrity of their indexes and to perform under our agreements; our ability to operate our business without violating the intellectual property rights of others and the costs associated with protecting our intellectual property rights; our ability to attract and retain skilled management and other personnel; our ability to minimize the risks, including our credit and default risks, associated with operating a European clearinghouse; our ability to accommodate trading and clearing volume and transaction traffic, including significant increases, without failure or degradation of performance of our systems; misconduct by those who use our markets or our products or for whom we clear transactions; challenges to our use of open source software code; our ability to meet our compliance obligations, including managing potential conflicts between our regulatory responsibilities and our for-profit status; our ability to

maintain BIDS Trading as an independently managed and operated trading venue, separate from and not integrated with our registered national securities exchanges; damage to our reputation; the ability of our compliance and risk management methods to effectively monitor and manage our risks; our ability to manage our growth and strategic acquisitions or alliances effectively; restrictions imposed by our debt obligations and our ability to make payments on or refinance our debt obligations; our ability to maintain an investment grade credit rating; impairment of our goodwill, long-lived assets, investments or intangible assets; and the accuracy of our estimates and expectations. More detailed information about factors that may affect our actual results to differ may be found in our filings with the SEC, including in our Annual Report on Form 10-K for the year ended December 31, 2020, and other filings made from time to time with the SEC.

We do not undertake, and we expressly disclaim, any duty to update any forward-looking statement whether as a result of new information, future events or otherwise, except as required by law. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. All planned dates and timelines are subject to change without notice.

## MATCHNow technology migration on track for February 1, 2022\*



### **New Resources to Prepare for Migration**

Integration microsite ([matchnow.cboe.com](https://matchnow.cboe.com)) will have links to the new technical specifications, a new connectivity manual, a comprehensive integration FAQ, and a platform change matrix.



### **Committed to Collaboration and Transparency**

Please continue to engage with us and share feedback as we work alongside you during your preparations for the Cboe/MATCHNow migration.



### **Building a Broader North American Equities Platform**

We believe the synergies between the largest Canadian ATS and Cboe's four U.S. equities exchanges – along with BIDS Trading – will create exciting opportunities as we look to leverage the strengths of each and inject further competition into the Canadian marketplace.

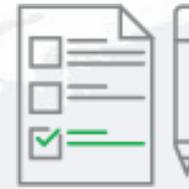
The first new offering planned for post-migration is enhancing MATCHNow's conditionals book with BIDS technology and the BIDS distribution network



## Broadening Canadian Client Adoption of Conditional Orders

MATCHNow will enhance functionality and allow subscribers and their sponsored clients to route conditional orders.

Cboe technology will serve as the matching engine, while BIDS technology will serve as the engine for conditionals, or "Cboe LIS".



## Third Client Conference Call Dedicated to Cboe LIS Powered by BIDS Technology

On **Tuesday, June 22**, we will review the planned changes that are intended to enhance our conditionals book with BIDS.

Cboe LIS powered by BIDS will be a game changer for block trading in Canada, further opening a world of possibilities for the Canadian equities market.

**Migration of the MATCHNow platform to Cboe Technology on February 1, 2022\*  
is a hard cut-over with no parallel production period**



**Technical  
Specifications**



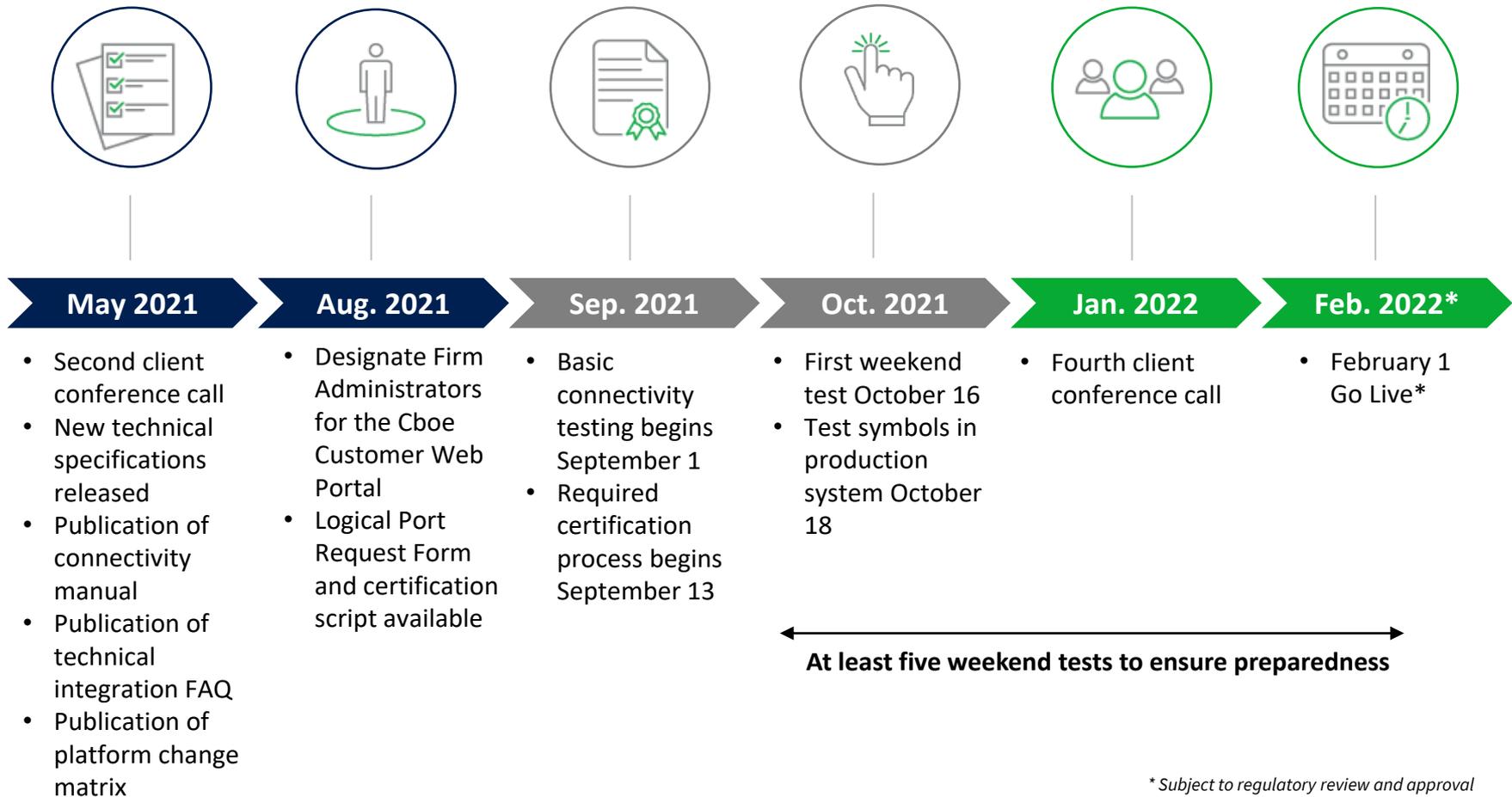
**Platform Change  
Matrix**



**Technical  
Integration FAQ**

Materials available today at [matchnow.cboe.com](https://matchnow.cboe.com)

## Migration Timeline and Key Milestone Dates to Plan For



## **MATCHNow connections on Cboe technology will require new physical connectivity**



Sep. 2021

- New physical connectivity required in TR2 for both production and certification system access, and to 350 Cermak for disaster recovery.
- Both data centers will support 1Gb and 10Gb connections.
- In September, orders for physical connections to new platform accepted.
- Equinix to offer waiver for initial cross connect install fee and Monthly Recurring Charges from September 1, 2021 through January 31, 2022.
- No additional Cboe connectivity fees prior to new platform activation for live production trading.
- TR2 to provide latency equalized access to Cboe trading platforms.
- Estimated 8 - 10 microseconds round-trip latency incurred for all connections.
- Latency tolerance level between each connection being engineered to nanosecond levels.

## All firms required to certify for basic functionality, as well as order types and order modifiers expected to be used in production



Sep. 2021

- Request free-of-charge certification order entry, market data, and drop sessions via the Logical Port Request form.
- Firms must specify desired changes to the default port settings.
- Legacy production and certification settings will not be applied; Cboe default settings can be found in the FIX specification on the microsite.
- FIX certification script available in certification tool in Customer Web Portal.
- Complete and submit certification script to order FIX and DROP production ports, and to input orders on new production system.
- On September 13, new MATCHNow certification environment available for testing.
- No automatic transfer of certification sessions from legacy MATCHNow platform to new Cboe platform; existing sessions cannot be used to certify.

## Five weekend tests in the new MATCHNow production environment to ensure preparedness



Oct. 2021

- First weekend test scheduled for **October 16.**
- Remainder of weekend tests running up until integration in February 2022:
  - November 13
  - December 11 (DR access and functionality test)
  - January 15
  - January 29
- On October 18, new production environment available for daily testing with test symbols available Monday through Friday.
- There will be no parallel period for full production trading operations.
- Please take advantage of the certification and production testing environments to conduct numerous, wide-ranging tests.

## Please reach out if any questions after reviewing the updated reference materials



May 2021

- Cboe's FIX, DROP and ODROP protocols to replace MATCHNow's current protocols.
- MATCHNow's three trading destinations will be accessible via single FIX connection.
- MATCHNow will leverage Cboe's multicast PITCH feed protocol.
- Market data from PITCH limited to execution and trade status information only and segregated into symbol-based channels for distribution.
- New and updated protocols now available on the microsite at [matchnow.cboe.com](https://matchnow.cboe.com).
- In addition to the Platform Change Matrix and Technical Integration FAQ, a Connectivity Manual, an Extranet Manual, Web Portal Specifications, and a Secure Web API Specification are also now available on the microsite.

## Key Highlights

- MATCHNow on track to migrate onto Cboe Technology on February 1, 2022\*.
- The migration will be a hard cut-over without a parallel production period.
- Until the switch-over, the MATCHNow platform will continue to operate as it does today.
- Reference materials now available on the integration microsite.

## Notable Dates

- June 22: client conference call dedicated exclusively to Cboe LIS powered by BIDS technology.
- August: order certification logical sessions and review certification script in Customer Web Portal.
- September 1: order physical connectivity and logical ports to new certification environment.
- September 13: new MATCHNow certification environment available for testing.
- October 16: first of five weekend testing opportunities begins.
- October 18: new production environment available for daily testing (M-F) with test symbols.
- December 11: test opportunity within the new DR platform.

## Resources

- Integration microsite: [matchnow.cboe.com](https://matchnow.cboe.com)
- MATCHNow Trade Desk: 416-861-1010 ext. 0

# Q&A

# Cboe Global Markets

[Cboe.com](https://www.cboe.com)