



# MATCHNow Technology Migration Client Conference Call

September 7, 2021



## Welcome & Overview

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



## Connectivity, Certification and Production Environment Testing

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



## Questions & Answers

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

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

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

**Adel Sarhan**, *Vice President, BIDS Trading Product Management*

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

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

**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 cause 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 migration remains on track for February 1, 2022\*,  
now is time to begin development work**



## **Building on our successful Conditionals offering**

- Excitement on the street from buy-side and sell-side for Cboe LIS powered by BIDS offering\*
- Cboe LIS in Europe has grown into one of the largest block platforms in Europe, holding the top spot in market share among all of Europe's block trading platforms in August
- Planned enhanced Conditionals functionality leverages BIDS' technology and distribution network and the Cboe LIS model as we look to build an even more robust electronic block offering in Canada



## **Time is now to begin migration preparations**

- Entering critical phase of migration timeline
- September through November, firms should get connected, certified and begin testing
- We're focused on executing a seamless technical and operational migration
- We are fully committed to supporting your preparations and will work alongside you to ensure you're ready for Day One

*\* Subject to regulatory approval*

# Key Migration Phases

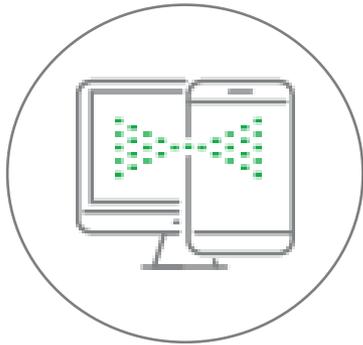


**Connectivity**

**Certification**

**Production**

## Connectivity through TR2 and CH2 data centers



- MATCHNow connections on Cboe technology will require new physical connectivity to be established in the TR2 and CH2 data centers
- Orders for physical connections to the new MATCHNow platform are now being accepted
- MATCHNow supports the following network connectivity choices:
  - IPsec VPN via the Internet - only for certification or test sessions
  - Co-location cross-connect - for clients co-located in Toronto TR2 data center
  - Extranet
  - Private line ethernet circuit extension from a carrier to MATCHNow
- A Cboe Customer Web Portal account is required to request a new cross-connect or to decommission existing connectivity to MATCHNow
- Cboe will not assess connectivity fees for connections to the new trading platform prior to the launch and production activation of the platform
- Equinix is offering a waiver for the initial cross-connect install fee and monthly recurring charges at TR2

Further details can be found in the MATCHNow Technical Integration FAQ, Connectivity Manual, and other specs linked to at [matchnow.cboe.com](https://matchnow.cboe.com)

## **Beginning Monday, September 13, firms may begin ordering logical access to certification environment**



- There will be no automatic transfer of certification sessions and existing MATCHNow certification sessions cannot be used to certify to the new trading platform
- Firms must establish physical connectivity to new MATCHNow latency equalized network infrastructure within TR2 before requesting new certification sessions for Cboe technology
- Free-of-charge certification order entry, market data and drop sessions may be requested via the Logical Port Request form once connection to TR2 is established
- All firms are required to certify for basic functionality, including establishing and maintaining connectivity, basic order entry functions and recovery of the session following a disconnect
- Certification sessions will be available Monday through Friday during normal trading hours
- Firms can self-certify through the Cboe Conformance Certification Tool on the Customer Web Portal or may call the MATCHNow Trade Desk to schedule a certification time

## Firms must complete certification to be able to trade in the production environment



- Once certified, firms will receive an electronic copy of their completed certification script and will then be able to request and connect to FIX sessions created in the production TR2 data center
- All new production sessions will be created with the Cboe default session settings – regardless of any prior production or certification settings
- Any desired non-default settings must be specified when requesting new production settings
- Port and port settings are visible through the Customer Web Portal, within the Logical Ports tool
- New production settings will first be available during a weekend test opportunity on Saturday, October 16<sup>th</sup>
- A new production environment for testing with test symbols will be opened on Monday, October 18<sup>th</sup>
  - Trades done using test symbols will appear on the new MATCHNow PITCH market data feed and in any requested drop copy sessions



## Key Testing Dates

- Saturday, October 16
- Saturday, November 13
- Saturday, December 11
- Saturday, January 15, 2022
- Saturday, January 29, 2022

## Weekend Testing Information

- Firms should plan to participate in at least one weekend test but are encouraged to join multiple to ensure preparedness
- Clients that have completed their certifications and requested logical ports in the production environment prior to October 16<sup>th</sup> will be able to participate in this first weekend test
- The December 11<sup>th</sup> test will be the only test in the disaster recovery environment
- Firms will need to have connectivity established to CH2 to participate in the disaster recovery test

## Key Highlights

- MATCHNow connections on Cboe technology will require new physical connectivity to be established in the TR2 and CH2 data centers
- Cboe will not assess additional connectivity fees for connections to the new trading platform prior to the launch and production activation of the platform
- Physical connectivity access to the certification/production environments is now available
- Trading in the production environment is not allowed until your firm has completed its certification
- The new production environment will be made available for daily testing with test symbols, Monday through Friday, starting on Monday, October 18<sup>th</sup>
- Saturday, October 16<sup>th</sup> is the first of five weekend testing opportunities with the Saturday, December 11<sup>th</sup> test providing the only opportunity to test within the 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)