



Cboe 2023 SIFMA/FIA and Regulation SCI BCP/DR Test Plan

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1. Overview

1.1. Purpose and Scope

Pursuant to Regulation Systems Compliance and Integrity (“Reg SCI”) Rule 1004, Cboe BYX Exchange, Inc. (“BYX”), Cboe BZX Exchange, Inc. (“BZX”), Cboe EDGA Exchange, Inc. (“EDGA”), and Cboe EDGX Exchange, Inc. (“EDGX”) Rule 2.4, Cboe Exchange, Inc. (“Cboe Options”) and Cboe C2 Exchange, Inc. (“C2 Options”) Rule 5.24, BYX, BZX, EDGA, EDGX, Cboe Options, and C2 Options (collectively, the “Exchange(s)”) are each required to establish standards for the designation of those participants that the respective Exchange reasonably determines are, taken as a whole, the minimum necessary for the maintenance of fair and orderly markets in the event of the activation of the Exchange’s business continuity and disaster recovery plans and designate participants pursuant to those standards.

Pursuant to Cboe Futures Exchange, LLC (“CFE”) Rule 513B, CFE Trading Privilege Holders are obligated to connect to CFE’s disaster recovery systems and participate in CFE and industry business continuity-disaster recovery testing as to the extent required by CFE.

Designated Members and Designated Trading Permit/Privilege Holders (“Designated Participants”) are required to participate in testing of the respective Exchange’s business continuity and disaster recovery plans.¹

The next mandatory test is **October 14, 2023**. The test is being conducted in coordination with other market centers, as part of the annual SIFMA/FIA industry test and in support of Reg SCI and CFE requirements. Information on Designated Participant requirements for this test, **which include completing at least two (2) executions on each designated Exchange market**, as well as the test schedule and scripts, are detailed in this document.

Please note that under BYX, BZX, EDGA, and EDGX Rule 5.1 and Cboe Options and C2 Option Rule 8.16(e),² Members are required to establish, maintain, and enforce written supervisory procedures designed to assure compliance with the requirements of applicable securities laws and regulations and applicable Exchange Rules, including mandatory testing requirements. Should a Designated Participant fail to supervise and/or participate in the mandatory testing, as required under BYX, BZX, EDGA, and EDGX Rule 2.4, Cboe Options and C2 Options Rule 5.24, or CFE Rule 513B, such failure may result in disciplinary action against the Member.

¹ Where applicable, Members and TPHs are collectively referred to herein as Members.

² Chapter 8 of the Cboe Options Rulebook is incorporated by reference into Chapter 8 of the C2 Options Rulebook.

2. Designated Members and Contract List

Pursuant to Interpretation and Policy .01 of BYX, BZX, EDGA, and EDGX Rule 2.4, Interpretation and Policy .01 of Cboe Options and C2 Options Rule 5.24, and CFE Rule 513B(c)(i), for purposes of identifying Designated Participants under the applicable designation criteria (discussed below), the Exchanges will measure volume executed on the respective Exchange during a single designated calendar quarter for a given year. The Exchanges will also individually notify all Designated Participants annually, and at least three (3) months prior to scheduled testing. For the **October 14, 2023** mandatory test, the designated calendar quarter for measuring volume is **Q1 2023**.

2.1. Member Selection Criteria

The Exchanges designate Members to participate in mandatory testing. Members meeting the following criteria have been determined to be Designated Participants of each Exchange and shall be required to connect to each applicable Exchange's Disaster Recovery ("DR") facility and participate in functional and performance testing:

- Member accounts for **five (5) percent** or more of the executed volume, measured on a quarterly basis during Q1 2023, on BYX Equities, BZX Equities, BZX Options, EDGA Equities, EDGX Equities, EDGX Options, Cboe Options, or C2 Options; or
- Member participates as a Lead Market-Maker ("LMM") with respect to one or more securities listed on BZX Equities during Q1 2023¹; or
- Trading Permit Holder accounts for **two (2) percent** or more of the executed customer volume in SPX and VIX options combined on Cboe Options, measured during Q1 2023; or
- Trading Permit Holder participates as a Market-Maker ("MM") or Lead Market-Maker ("LMM") in option classes exclusively listed by Cboe Options and has streamed quotes in such class(es) at any point during Q1 2023;² or
- Trading Permit Holder participates as a Designated Primary Market-Maker ("DPM") in any multiply listed option class(es) on Cboe Options during Q1 2023.
- Trading Privilege Holder is a Designated Primary Market Maker in any CFE product during Q1 2023; Trading Privilege Holder is a Lead Market-Maker in IBHY, IBIG, or AMERIBOR futures during Q1 2023 that accounts for **fifteen (15) percent** or more of the executed proprietary trading volume in IBHY and IBIG futures or in AMERIBOR futures measured during Q1 2023; or Trading Privilege Holder accounts for **five (5) percent** or more of the executed proprietary trading volume in VX futures measured during Q1 2023.

While Designated Participants are required to connect to the applicable Exchange DR facility, all Members are permitted and encouraged to connect to the Exchanges' DR facilities, as well as participate in the testing of the DR systems.

Designated Participants are required to connect to and participate in testing on each Exchange market

¹ Aggregated executed volume will be determined based on the volume of orders a TPH/member routes directing to the Exchange(s) or the volume of orders the TPH/Member routes on behalf of other TPHs/Members in a Designated Give Up Capacity.

² Exclusively listed means an option that is listed exclusively by an Exchange(s) because the Exchange(s) has an exclusive license to use, or has proprietary rights in, the interest underlying the option.

for which they meet the established criteria. Please note that Designated Participants that use a third party for connectivity must participate; it is not sufficient for only the third party to participate in testing. The Exchanges will announce mandatory testing dates periodically, with at least one mandatory test per year.

2.2. Member Participation Requirements

As required by Reg SCI and CFE Rule 513B, certain Members of each Cboe equities and options trading platform will have mandatory participation requirements in an annual DR test. Requirements for qualifying Members are based on the platform as defined below. Non-qualifying Members are also encouraged to participate but will have no registration or level of activity requirements during the test.

Annually, and at least three (3) months prior to scheduled testing, Cboe will provide notice to qualifying Members that will be Designated BCP/DR Participants having a mandatory DR testing participation requirement. Members that qualified for mandatory participation based on designation criteria including executed volume measured during Q1 2023 are required to participate in the test. Designated Participants are required to connect to each designated Exchange's secondary site and submit a meaningful number of orders during the test. The required level of activity will be at least two (2) executions on each designated Exchange. Quote messages will not satisfy the execution requirements and executions may be either buy or sell. All symbols will be available for order entry and the Cboe Trade Desk will be available to support crossing orders if needed.

For questions about mandatory participation requirements, please contact Cboe Compliance at SCIQuestions@cboe.com or 312.786.7050.

For questions about related rule requirements, please contact Regulatory Interpretations at RegInterps@cboe.com or 312.786.8141.

2.3. Contact List

The Cboe Trade Desk, CFE Trade Desk, OSC, and NOC will be available for support for the duration of all weekend test opportunities as well as during normal business hours. Cboe Compliance is available for questions about mandatory participation requirements during normal business hours.

Cboe Trade Desk

913.815.7001

tradedesk@cboe.com

Cboe NOC

913.815.7005

noc@cboe.com

CFE Trade Desk

312.786.8700

cfetradedesk@cboe.com

Cboe Compliance

312.786.7050

SCIQuestions@cboe.com

Cboe Operations Support Center

866.728.2263

osc@cboe.com

3. Pre-Testing

3.1. Test Description

To facilitate readiness for the formal testing on October 14, 2023, Cboe in coordination with other market centers, as part of the annual SIFMA/FIA industry test and in support of Reg SCI requirements will facilitate two pre-tests from our Chicago (Secondary) site. This test will **not** involve a failover from Secaucus (Primary) to Chicago (Secondary) site like the formal test on October 14, 2023.

3.2. Systems Availability

Secondary site ports in Chicago for BYX, BZX, EDGA, EDGX, Cboe Options, C2 Options, and CFE will be available for testing during all pre-tests.

3.3. Dates

- September 23, 2023 – BCP Pre-Test #1
- September 30, 2023 – BCP Pre-Test #2

3.4. Testing Requirements

Participation in pre-tests is optional and on a voluntary basis, but Cboe highly encourages participation during available testing opportunities.

In addition to the aforementioned scheduled pre-tests, Cboe also supports connectivity (telnet) testing to our secondary site ports in Chicago for BYX, BZX, EDGA, EDGX, Cboe Options, C2 Options, and CFE for telnet testing at any time. Secondary site ports are also available for session level connectivity during normal trading hours. Orders submitted during trading hours outside of a DR scenario will result in rejects.

3.5. Test Plan

All symbols will be made available during the pre-tests for order entry and systems will start up at the respective Exchange's **Secondary** Chicago site. Members with connectivity to the secondary site will be allowed to connect, submit orders, and receive market data for the duration of the test.

Per normal weekend test standards, the trade date for all transactions on all Exchange messaging (e.g., order acknowledgements, execution reports, drop, and market data) during both the pre-tests will be the actual calendar date of **September 23, 2023** and **September 30, 2023**. The following functionality will be available for testing but will not be verified or required by Cboe:

- Customer connectivity
- Pre-open session
- Regular market trading session open
- Trade activity
- Market data dissemination
- Order routing (equities, options, and futures)

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- Clearing Equities IPO functionality (using test symbol ZBZX on BZX)
- Regular market trading session close
- After-market trading session (equities and options)
- Daily settlement price dissemination (futures)

There is an analogous port in the secondary data center ready for connection for each Member port in the primary data center. Secondary data center port information can be found within the Cboe [Customer Web Portal](#).

3.6. Test Day Schedule

The expected pre-test schedule for the **Cboe Equities markets** (subject to adjustment with notice) for all pre-tests will be as follows:

- 7:30 a.m. ET – Connectivity Chicago (Secondary) sites made available. Pre-open trading session begins.
- 9:30 a.m. ET – Regular market trading session open
- 10:15 a.m. ET – IPO on BZX using test symbol ZBZX
- Noon ET – Regular market trading session close
- 1:00 p.m. ET – Post-market trading session close

The expected pre-test schedule for the **Cboe Options markets** (subject to adjustment with notice) for all pre-tests will be as follows:

- 7:30 a.m. ET - Connectivity to Chicago (Secondary) sites made available. GTH order acceptance (C1 Only) begins.
- 9:15 a.m. ET – GTH session ends (C1 Only)
- 9:30 a.m. ET – Regular market trading session open
- 1:00 p.m. ET – Regular market trading session close

The expected pre-test schedule for the **CFE market** (subject to adjustment with notice) for all pre-tests will be as follows:

- 6:30 a.m. CT - Connectivity to Chicago (Secondary) sites made available. Pre-open/queuing begins.
- 8:30 a.m. CT – Regular market trading session open
- Noon CT – Regular market trading session close. Daily settlement prices will be calculated and disseminated shortly after the session close.

3.7. Test Activities

There is no required level of activity for the pre-test. Members may perform any testing needed in order to meet their internal requirements to be ready for the formal test on **October 14, 2023**.

3.8. Symbols

All symbols will be made available for order entry for the Chicago (Secondary) sites during all pre-tests.

4. Formal Testing

The formal tests scheduled on October 14, 2023 will begin out of the primary Secaucus datacenter and perform a failover to the secondary Chicago DR datacenter site.

4.1. Test Description

To facilitate testing, in coordination with other market centers, as part of the annual SIFMA/FIA industry test and in support of Reg SCI requirements. This test will involve a failover from Secaucus (Primary) to Chicago (Secondary) site.

4.2. Systems Availability

Primary site ports in Secaucus and Secondary site ports in Chicago for BYX, BZX, EDGA, EDGX, Cboe Options, C2 Options, and CFE will be available for testing during the formal test.

4.3. Dates

- October 14, 2023 – Reg SCI/SIFMA BCP Formal Test

4.4. Testing Requirements

As required by Reg SCI and CFE Rule 513B, certain Members of each Cboe equities, options, and futures trading platform will have mandatory participation requirements in an annual DR test. Non-qualifying Members are also encouraged to participate but will have no registration or level of activity requirements during the test.

4.5. Test Plan

All symbols will be made available for order entry and systems will start up at the respective Exchange's Primary site and perform a failover to the Secondary Chicago site. Members with connectivity to the secondary site will be allowed to connect, submit orders, and receive market data for the duration of the test following the failover from the Primary site to the Secondary site per the below schedule.

Per normal weekend test standards, the trade date for all transactions on all Exchange messaging (e.g., order acknowledgements, execution reports, drop, and market data) during the official test on **October 14, 2023**. The following functionality will be testable and verifiable during the DR test:

- Customer connectivity
- Pre-open session
- Regular market trading session open
- Trade activity
- Market data dissemination
- Order routing (equities, options, and futures)
- Clearing Equities IPO functionality (using test symbol ZBZX on BZX)
- Regular market trading session close

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- After-market trading session (equities and options)
- Daily settlement price dissemination (futures)

There is an analogous port in the secondary data center ready for connection for each Member port in the primary data center. Secondary data center port information can be found within the Cboe [Customer Web Portal](#).

4.6. Test Schedule

The expected test schedule for the **Cboe Equities markets** (subject to adjustment with notice) for the formal test will be as follows:

- 7:30 a.m. ET – Connectivity to Secaucus (Primary) and Chicago (Secondary) sites made available and Pre-open trading session to Secaucus (Primary) site.
- 8:00 a.m. ET – Cboe initiates switch between Secaucus (Primary) and Chicago (Secondary) sites
- 8:30 a.m. ET – Connectivity reestablished to Chicago DR site (as Primary) made available and Pre-market trading in Chicago (as Primary) site continues.
- 9:30 a.m. ET – Regular market trading session open.
- 10:15 a.m. ET – IPO on BZX using test symbol ZBZX.
- Noon ET – Regular market trading session close.
- 1:00 p.m. ET – Post-market trading session close.

The expected test schedule for the **Cboe Options markets** (subject to adjustment with notice) for the formal test will be as follows:

- 7:30 a.m. ET – Connectivity to Secaucus (Primary) and Chicago (Secondary) sites made available and Pre-open trading session to Secaucus (Primary) site.
- 8:00 a.m. ET – Cboe initiates switch between Secaucus (Primary) and Chicago (Secondary) sites
- 8:30 a.m. ET – Connectivity reestablished to Chicago DR site (as Primary) made available and Pre-open queuing/GTH trading in Chicago (as Primary) site continues.
- 9:15 a.m. ET – GTH session ends (C1 Only).
- 9:30 a.m. ET – Regular market trading session open.
- 1:00 p.m. ET – Regular market trading session close.

The expected weekend test schedule for the **Cboe Futures market** (subject to adjustment with notice) for the formal test will be as follows:

- 6:30 a.m. CT - Connectivity to Secaucus (Primary) and Chicago (Secondary) sites made available and Pre-open/queuing begins to Secaucus (Primary) site.
- 7:00 a.m. CT – CFE initiates switch between Secaucus (Primary) and Chicago (Secondary) sites.
- 7:30 a.m. CT – Connectivity reestablished to the Chicago DR site (as Primary) made available and Pre-open/queuing to Chicago (as Primary) site continues.
- 8:30 a.m. CT – Regular market trading session open.
- Noon CT – Regular market trading session close. Daily settlement prices will be calculated and disseminated shortly after the session close.

4.7. Test Activities

The required level of activity for the formal test will be at least two (2) executions on each designated Exchange. Quote messages will not satisfy the execution requirements and executions may be either buy or sell. Optionally members may perform additional testing to meet their internal requirements.

4.8. Test Parameters

Designated Participants are required to connect to and participate in testing on each Exchange market for which they meet the established criteria. Please note that Designated Participants that use a third party for connectivity must participate; it is not sufficient for only the third party to participate in testing.

4.9. Symbols

All symbols will be made available for order entry for both the Secaucus (Primary) and Chicago (Secondary) sites.

4.10. Opening Pricing

Cboe does not have a testing requirement for the opening price.

4.11. Minimum Transactions

The minimum requirement for testing is 2 executions.

4.12. Maximum Transactions

There is no maximum limit for transactions.

6. Test Completion

6.1. Acknowledgement Protocol

Cboe Compliance will utilize contact information provided by SIFMA or FIA along with Cboe's internal contact list to distribute notification of required testing to Designated Participants.

Voluntary participation by non-designated members is encouraged. Members who have not been notified of required testing may confirm their intended voluntary participation by reaching out to Cboe Compliance, CFE Trade Desk, or the Cboe Trade Desk.

Please address any questions regarding testing requirements and designated participation to SCIQuestions@cboe.com.

Trading Operations will send Trade Desk Notices to provide updates and reminders for testing. Trade Desk notices can be found on markets.cboe.com by viewing [Equities Schedule Updates](#), [Options Schedule Updates](#), and [CFE Schedule Updates](#). Notices may also be sent directly to an email address by enrollment in the Trade Desk Notice distribution list. Please contact the CFE Trade Desk or Cboe Trade Desk to add an email address to the distribution list. The CFE Trade Desk and Cboe Trade Desk will be available the day of the test to address any questions via email or phone.

6.2. Post-Test Notification

Participants may send an email to the CFE Trade Desk or Cboe Trade Desk as applicable during the duration of the test to confirm fulfillment of testing obligations. The Trade Desks will be actively monitoring and tracking activity during the test and will communicate with Designated Participants to address any concerns regarding meeting test requirements. Designated Participants do not need to provide evidence of testing results to Cboe.

Following the day of the test, Designated Participants may contact Cboe Compliance, CFE Trade Desk, or Cboe Trade Desk to request confirmation that testing obligations were met.

7. Reference Materials

7.1. Additional Information

- [Cboe U.S. Equities Regulation web page](#)
- [Cboe U.S. Options Regulation web page](#)
- [Cboe U.S. Futures Regulation web page](#)
- [Cboe Web Portal](#) (for secondary IPs)

7.2. Referenced Protocols

Order Entry :

- [US Options BOE Specification](#)
- [US Options FIX Specification](#)
- [US Equities BOE Specification](#)
- [US Equities FIX Specification](#)
- [US Futures BOE Specification](#)
- [US Futures FIX Specification](#)

Market Data:

- [US Equities TOP Specification](#)
- [US Equities TCP Depth of Book \(PITCH\) Specification](#)
- [US Equities/Options Multicast PITCH Specification](#)
- [US Equities Summary Depth Feed Specification](#)
- [US Equities Auction Feed Specification](#)
- [US Equities Cboe One Feed Specification](#)
- [US Options Multicast TOP Specification](#)
- [US Options Complex Multicast TOP Specification](#)
- [US Options Complex Multicast PITCH Specification](#)
- [US Options Complex Auction Multicast PITCH Specification](#)
- [US Options Auction Feed Specification](#)
- [US Options FLEX Feed Specification](#)
- [US Options Opening Process Feed Specification](#)
- [US Futures Multicast TOP Specification](#)
- [US Futures Multicast PITCH Specification](#)

Revision History

Document Version	Date	Description
1.0.0	03/10/23	Initial publication.
1.0.1	05/05/23	Updated pre-test dates.