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**Part II:           Activities of the Broker-Dealer Operator and its Affiliates**

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**Item 5:           Other Products and Services**

- a. **Does the Broker-Dealer Operator offer Subscribers any products or services for the purpose of effecting transactions or submitting, disseminating, or displaying orders and trading interest in the NMS Stock ATS (e.g., algorithmic trading products that send orders to the ATS, order management or order execution systems, data feeds regarding orders and trading interest in, or executions occurring on, the ATS)?**

**Yes ☒ No ☐**

**If yes, identify the products or services offered, provide a summary of the terms and conditions for use, and list here the applicable Item number in Part III of this form where the use of the product or service is explained. If there is no applicable Item in Part III, explain the use of the product or service with the ATS here.**

As used throughout this form, the following terms have the following meanings:

- **Subscriber** – An SEC registered broker/dealer that enters into a Subscriber Agreement with BIDS and meets any other applicable eligibility requirements to participate on the BIDS ATS as described in Part III, Item 2.
- **Sponsored Firm** – A firm that is sponsored by a Subscriber to trade on the BIDS ATS.
- **Sponsor** – A Subscriber that sponsors a Sponsored Firm.
- **Participant** – A Subscriber or Sponsored Firm.

- **Trader** – An individual trading on the BIDS ATS with a Sponsored Firm give-up or a Participant's FIX tag 50 order flow (e.g., algorithmic order flow).
- **Firm order** – Firm orders are executable according to the order specifications.
- **Conditionals** – Conditionals are trading interests that are not executable.
- **Actionable IOI ("AIOI") – targeted indication of interest sent by a Sponsor to one or more of its Sponsored Firms (Part III, Item 9). An AIOI can be submitted as firm or conditional by the Sponsor.**
- **BIDS Trader** – A proprietary front-end user interface that facilitates submission of Firm orders and Conditionals into the BIDS ATS and/or the Cboe Large-In-Scale ("LIS") EU venue as described in Part III, Item 5.
- **BIDS Trader User** – A Sponsored Firm's individual trader using BIDS Trader to trade on the BIDS ATS or elsewhere.

Firm orders and Conditionals are described in Part III, Sections 7 and 9.

As described in Part III, Item 5, BIDS makes available to all Participants a proprietary front-end user interface called BIDS Trader that facilitates submission of Firm orders and Conditionals into the BIDS ATS and/or the Cboe Large-In-Scale ("LIS") EU venue. BIDS does not restrict the use of BIDS Trader by a Participant other than requiring that a Participant using BIDS Trader must have been approved by a Sponsor, and the Sponsor must set risk limits for the Sponsored Firm.

- b. **If yes to Item 5(a), are the terms and conditions of the services or products required to be identified in Item 5(a) the same for all Subscribers and the Broker-Dealer Operator?**

Yes ☒ No ☐

If no, identify and explain any differences.

- c. **Does any Affiliate of the Broker-Dealer Operator offer Subscribers, the Broker-Dealer Operator, or both, any products or services for the purpose of effecting transactions or submitting, disseminating, or displaying orders or trading interest in the NMS Stock ATS?**

Yes ☐ No ☒

If yes, identify the products or services offered, provide a summary of the terms and conditions for use, and list here the applicable Item number in Part III of this form where the use of the product or service is explained. If there is no applicable item in Part III, explain the use of the product or service with the ATS here.

- d. **If yes to Item 5(c), are the terms and conditions of the services or products required to be identified in Item 5(c) the same for all Subscribers and the Broker-Dealer Operator?**

Yes ☐ No ☐

If no, identify and explain any differences.

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**Item 7: Protection of Confidential Trading Information**

- a. **Describe the written safeguards and written procedures to protect the confidential trading information of Subscribers to the NMS Stock ATS, including:**
  - i. **written standards controlling employees of the ATS that trade for employees' accounts; and**
  - ii. **written oversight procedures to ensure that the safeguards and procedures described above are implemented and followed.**

The BIDS ATS operates as a dark venue and does not disclose confidential information to third parties, other than as needed to complete transactions or comply with securities laws and regulations as discussed in this Part II, Item 7 or elsewhere in this Form ATS-N.

Confidential Data is defined as:

**Gateway Logs:** Transaction logs for protocol gateways connecting from order management systems ("OMS")/execution management systems ("EMS") to the BIDS ATS

**Firm Order Information:** Information regarding all Firm orders.

**Conditional Information:** Information regarding Conditionals and invitations in the BIDS ATS.

**AIOI Information: Information regarding all AIOIs in the BIDS ATS.**

**Trade Information:** Trades in the BIDS ATS during the live trading session.

**Sponsor Settings:** Administrative settings and risk limits of Sponsored Firms managed by Sponsors.

**Scorecards and Filter Settings:** BIDS Scorecard values for Traders and Filter settings set by Traders (discussed in Part III, Items 7 and 9).

**Trader Configuration:** Preferences set by Traders for Firm order and Conditional interaction on the BIDS ATS.

**Database Information:** Transaction and configuration data stored in the BIDS ATS databases.

**Server Logs:** Log files generated by the BIDS ATS applications.

Given the sponsored access model made available by BIDS (discussed in Part III, Item 2), BIDS provides each Sponsor with information related to any Firm order, Conditional, or trade on which that Sponsor has been designated by a Sponsored Firm. BIDS does not engage in any trading activities other than activity in connection with the operation of the BIDS ATS as described in this Form ATS-N and, as a result, does not engage in activities that may be deemed in conflict with the BIDS ATS.

As part of operating the BIDS ATS, BIDS maintains written policies, procedures and controls ("Confidentiality Safeguards") designed to safeguard the confidentiality, integrity and availability of the BIDS ATS by preventing unauthorized access to or use of Participants'

Confidential Data. The Confidentiality Safeguards include:

- a. Guidance with Respect to Handling Information: Confidentiality and Privacy Policy
- b. Cybersecurity Policy
- c. Compliance Manual
- d. Supervisory Procedures

The Confidentiality Safeguards are reviewed, tested and updated regularly as described below. Key aspects of the Employee Access Safeguards and the System Safeguards prescribed by the Confidentiality Safeguards are summarized below.

As part of the Confidentiality Safeguards, BIDS requires that all employees and independent contractors of BIDS and its affiliates, including BTT, (collectively referred to as “employees”) acknowledge receipt and review of applicable BIDS’ written policies at the time of hiring, and at least annually thereafter. In addition, all employees must complete security awareness training as part of the onboarding process and complete periodic confidentiality training during employment. BIDS also operates a continuous, organization-wide security awareness program that includes regular testing related to phishing and social engineering.

## **EMPLOYEE ACCESS SAFEGUARDS**

### **A. Employee Access Safeguards**

BIDS strictly limits the employees that may access the live BIDS ATS production networks, databases, servers, and ATS applications (collectively, the “BIDS Systems”) and data to those employees that must have such access to perform their jobs. BIDS enforces these protections by implementing access controls around the BIDS Systems. Permitted employees can only access these BIDS Systems through a secure authentication process.

#### **1. Access Controls:**

- a. Access to BIDS Systems and data is restricted to authorized employees based on job responsibility and approved in advance by management. BIDS management regularly reviews access rights to BIDS Systems.
- b. Data in the BIDS ATS is partitioned by Participant and Trader. BIDS management regularly reviews and tests access control rules in the BIDS ATS.

#### **2. Authentication:**

- a. Individual employee access must be authenticated and is reviewed by BIDS management.
- b. Credentials for and access by administrative users are securely maintained and

reviewed regularly by BIDS management.

- c. BIDS network services (e.g., BIDS ATS, BIDS Windows Active Directory) automatically enforce password complexity and password aging rules for access.
  - d. BIDS requires multi-factor authentication for remote access by employees through secure VPN tunnels.
3. Logging:
- a. Firm orders, Conditionals, trades and application configuration changes in the BIDS Systems are time-stamped and recorded in logs.
  - b. Clocks on BIDS Systems devices are synchronized using Precision Time Protocol (“PTP”) to ensure that timestamps are accurate and consistent. PTP is an industry standard protocol used to synchronize computer clocks with a high degree of accuracy.
  - c. Ad hoc queries and ad hoc changes made to the BIDS ATS database are logged and reviewed on a regular basis by BIDS management.

## **B. Trading by Employees**

Other than operating the BIDS ATS as described in this Form ATS-N, BIDS does not engage in trading and, as a result, does not have employees responsible for trading activities. BIDS does, however, permit employees to maintain personal investment accounts with third party brokers. Employees are required to disclose to BIDS all personal trading accounts controlled by the employee (and other related accounts as set forth in BIDS’ policies<sup>1</sup>, collectively “outside accounts”) and provide BIDS with access to trading confirmations and account statements for these outside accounts. With access to this information, the firm’s compliance department reviews and monitors trading by all employees. Employees must request and receive prior compliance approval for all transactions in covered securities (i.e., securities eligible to be traded on the BIDS ATS) for themselves or in their outside accounts.

As part of the employee trading review, the compliance department compares the requested transactions to activity on the BIDS ATS at the time of the request to verify that recent transactions on the BIDS ATS and confidential information available to the BIDS ATS does not appear in conflict with the employee trade request. Any appearance of potential conflict would cause denial of the trade request and an investigation of whether any conflict exists. In addition to prior approval, employees must hold positions in covered securities for a minimum of 30 days,

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<sup>1</sup> Employee accounts also include accounts of the employee’s spouse, partner, minor children and other members of the employee’s household and any account in which the employee has an interest or has the power, directly or indirectly, to make or influence investment decisions (any person who is supported, directly or indirectly, to a material extent by the employee).

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with certain limited exceptions.

## **SYSTEM SAFEGUARDS**

**In addition to internal controls, BIDS has established rigorous safeguards designed to protect the BIDS Systems and the Confidential Data processed by the systems from external threats, as set forth below.**

### **A. Physical Security**

The BIDS Systems are hosted in Equinix data centers and subject to high security standards, including video surveillance, 24x7 armed security, and multi-factor physical access. The physical and operational security controls at these data centers are assessed by independent third parties annually. The facilities maintain multiple backup power systems to help ensure continuous operation in the event of electrical power failure.

### **B. Network Security**

Participants access the BIDS ATS through point-to-point network cross connects, managed private networks, or over secure Internet connections. Data in transit over the Internet is encrypted. In addition, BIDS employs firewalls to isolate the BIDS Systems from the Internet.

### **C. Network Monitoring**

BIDS forwards BIDS Systems, network, and application logs to a secure, write-once log aggregation system for analysis and alerting for BIDS engineering, IT and operations staff. BIDS monitors and protects its networks using a security intrusion detection system (IDS) and intrusion prevention system (IPS) on a 24x7x365 basis.

### **D. Web Access and Email**

BIDS has in place an enterprise Data Loss/Threat Prevention (DLP/DTP) solution and web proxies to monitor and filter outbound email and web traffic from inside BIDS networks. BIDS uses an email gateway service to filter all inbound email. Participants can request encrypted emails through bi-directional enforced transport layer security (TLS) connections.

### **E. Vulnerability Management**

BIDS scans all BIDS networks on a regular basis for vulnerabilities. The results of scanning are reviewed by BIDS engineering, IT and BIDS management. If issues are identified, remediation activities are scheduled and undertaken. Firewall patches are applied on a regular basis, based on vulnerability severity and operational risk considerations.

### **F. Risk Management**

BIDS maintains an organization-wide operational risk management program that includes ongoing assessments of strategic, environmental, financial, compliance, security and operational risks. This risk management program is subject to ongoing review and update by BIDS management, including a review of any operational and security incidents, vulnerability management programs, penetration tests and other assessments, and the status of control programs.

#### **G. Third-Party Supplier Management**

BIDS performs risk-based reviews (by legal, compliance and management) of third-party supplier relationships at the time of engagement and on an annual basis. The initial review includes consideration of the service levels to be performed, potential strategic risk, and the security and confidentiality controls of the supplier. In addition, BIDS may require a non-disclosure agreement or similar provisions as part of a third-party supplier relationship. On an annual basis, BIDS operations and compliance reviews third-party suppliers. As part of this annual review, BIDS operations and compliance identify critical suppliers and review their security and confidentiality controls. The results of this annual review are recorded and approved by BIDS management.

#### **H. Incident Response**

BIDS maintains a cyber security incident response program which involves BIDS ATS operations, engineering, IT, compliance and legal staff, and BIDS management. A Computer Security Incident Response Plan (“CSIRP”) lays out clear procedures and responsibilities for handling of security incidents including the loss or theft of Confidential Data, and violations of security protocols. BIDS management reviews and tests the CSIRP at least annually.

#### **I. Security Assessments and Audits**

Existing security controls (including those described in this Part II, Item 7) are reviewed and tested by BIDS management on a regular basis, including scheduled vulnerability scanning and penetration testing, operational and security checks, quarterly and annual BIDS management reviews, and ad hoc checks. The results of these reviews are retained for internal control and audit purposes.

In addition to BIDS management and BIDS compliance reviews, BIDS contracts with third party providers to conduct security tests, audits, and assessments, including the following:

1. Network penetration/vulnerability testing (at least annually)
2. Application penetration testing (at least annually)
3. Annual IT control audit
4. Annual SOC 2 Type II assessment of BIDS ATS security and confidentiality controls

The results of these tests, audits, and assessments are reviewed with BIDS management.

- b. Can a Subscriber consent to the disclosure of its confidential trading information to any Person (not including those employees of the NMS Stock ATS who are operating**



the system or responsible for its compliance with applicable rules)?

Yes ☐ No ☒

If yes, explain how and under what conditions.

- c. If yes to Item 7(b), can a Subscriber withdraw consent to the disclosure of its confidential trading information to any Person (not including those employees of the NMS Stock ATS who are operating the system or responsible for its compliance with applicable rules)?

Yes ☐ No ☐

If yes, explain how and under what conditions.

- d. Provide a summary of the roles and responsibilities of any Persons that have access to confidential trading information, the confidential trading information that is accessible by them, and the basis for the access.

The list below sets forth a summary of roles and responsibilities of the employees who have access to some or all Confidential Data. With regard to each employee role, the basis for approved access to the Confidential Data is to service or support the BIDS ATS in line with the responsibilities of the particular role.

As a general matter, BIDS restricts access to Confidential Data solely to those employees who have a need to know in order to assure the efficient and uninterrupted operation of the BIDS ATS.

**1. Role of Permissioned Employee: ATS Sales Support**

**a. Responsibilities**

- i. Sales support covering Participants;
- ii. Provide training to Participants' staff;
- iii. Assist Participants with use of the BIDS ATS;
- iv. Participant reporting and management reporting

**b. Confidential Data subset that ATS Sales Support can access is limited to:**

- i. Trader Configuration;
- ii. Firm order Information;
- iii. Conditional Information;
- iv. ~~Trade~~AIOI Information;
- v. Trade Information;
- vi. ~~v.~~ Sponsor Settings;
- vii. ~~vi.~~ Scorecards and Filter Settings

**c. Additional Information**

- i. Licensed sales/customer service personnel;



- ii. Access approved by Head of Sales;
- iii. ATS Sales Support employees have access to the Confidential Data of Participants as required for support and sales purposes; and
- iv. Access to data through application query screens and admin screens

## **2. Role of Permissioned Employee: ATS Integration Desk**

### **a. Responsibilities**

- i. Onboarding and set-up of Participants and Traders;
- ii. Day-to-day monitoring and support of connectivity to the BIDS ATS;
- iii. Resetting BIDS ATS credentials on request of Traders;
- iv. First level application support – troubleshoot common connectivity and operational issues

### **b. Confidential Data subset that ATS Integration Desk can access is limited to:**

- i. Trader Configuration;
- ii. Firm order Information;
- iii. Conditional Information;
- iv. ~~Trade~~AIOI Information;
- v. Trade Information;
- vi. ~~v.~~ Sponsor Settings;
- vii. ~~vi.~~ Scorecards and Filter Settings;
- viii. ~~vii.~~ Gateway Logs

### **c. Additional Information**

- i. Licensed help desk personnel;
- ii. Access approved by Chief Operating Officer (COO);
- iii. Session command-line and database activities are logged and reviewed by BIDS management

## **3. Role of Permissioned Employee: ATS Operations**

### **a. Responsibilities**

- i. Day-to-day ATS operational support, including job scheduling and job recovery;
- ii. Application monitoring and alert management;
- iii. System configuration changes, configuration reviews/health checks;
- iv. Deploy changes/upgrades to ATS software;
- v. Data archival and data repair;
- vi. Ad hoc data analysis and queries;
- vii. Second level application support – incident response, problem investigation and recovery

### **b. Confidential Data that ATS Operations can access:**

- i. Trader Configuration;

- ii. Gateway Logs;
- iii. Firm order Information;
- iv. Conditional Information;
- v. ~~Trade~~AIOI Information;
- vi. Trade Information;
- vii. ~~vi.~~ Scorecards and Filter Settings;
- viii. ~~vii.~~ Sponsor Settings;
- ix. ~~viii.~~ Database Information;
- x. ~~ix.~~ Server Logs

**c. Additional Information**

- i. Engineering personnel;
- ii. Access approved by COO;
- iii. Session command-line and database activities are logged and reviewed by BIDS management

**4. Role of Permissioned Employee: BIDS Compliance**

**a. Responsibilities**

- i. Regulatory compliance for BIDS and the BIDS ATS

**b. Confidential Data subset that BIDS Compliance can access is limited to:**

- i. Trader Configuration;
- ii. Firm order Information;
- iii. Conditional Information;
- iv. ~~Trade~~AIOI Information;
- v. Trade Information;
- vi. ~~v.~~ Sponsor Settings;
- vii. ~~vi.~~ Scorecards and Filter Settings

**c. Additional Information**

- i. BIDS compliance employees have access to the Confidential Data of Participants as required for compliance purposes;
- ii. Access to data through application query screens and admin screens;
- iii. Access approved by COO

**5. Role of Permissioned Employee: Developers on Call**

**a. Responsibilities**

- i. Assist ATS Operations with problem investigation, diagnosis and recovery;
- ii. Application monitoring and alert management;
- iii. Assist with software deployment/changes as required by ATS Operations;
- iv. Ad hoc data analysis and queries;
- v. System performance analysis and tuning;

- vi. Third level application support – problem recovery, root cause analysis, software patching

**b. Confidential Data that Developers on Call can access:**

- i. Trader Configuration;
- ii. Gateway Logs;
- iii. Firm order Information;
- iv. Conditional Information;
- v. ~~Trade~~AIOI Information;
- vi. Trade Information;
- vii. ~~vi.~~ Scorecards and Filter Settings;
- viii. ~~vii.~~ Sponsor Settings;
- ix. ~~viii.~~ Database Information;
- x. ~~ix.~~ Server Logs

**c. Additional Information**

- i. Senior developers on support rotation, accessing BIDS ATS system/data as requested by ATS Operations or the ATS Integration Desk;
- ii. Access approved by COO;
- iii. Session command-line and database activities are logged and reviewed by BIDS management

**6. Role of Permissioned Employee: ATS Analytics and Reporting**

**a. Responsibilities**

- i. Analytics and management reporting, metrics and statistics;
- ii. Ad hoc queries and analysis on request of ATS Sales Support or management

**b. Confidential Data subset that ATS Analytics and Reporting can access is limited to:**

- i. Trader Configuration;
- ii. Firm order Information;
- iii. Conditional Information;
- iv. ~~Trade~~AIOI Information;
- v. Trade Information;
- vi. ~~v.~~ Scorecards and Filter Settings;
- vii. ~~vi.~~ Sponsor Settings;
- viii. ~~vii.~~ Database Information

**c. Additional Information**

- i. Licensed personnel and senior developers;
- ii. Access approved by COO
- iii. Session command-line and database activities are logged and reviewed by BIDS management

## **7. Role of Permissioned Employee: System Engineering**

### **a. Responsibilities**

- i. Provision, configure, monitor and support the runtime infrastructure (servers, network, databases) for the BIDS ATS;
- ii. System utilization and performance analysis and tuning;
- iii. BIDS Operations user set up; Incident response, troubleshooting and recovery

### **b. Confidential Data subset that System Engineering can access is limited to:**

- i. Confidential Data stored on infrastructure devices that are managed by the engineer

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### **c. Additional Information**

- i. Engineering personnel;
- ii. Access approved by COO

## **8. Role of Permissioned Employee: IT Administrators**

### **a. Responsibilities**

- i. Engineering and operational support of office IT applications and services

### **b. Confidential Data subset that IT Administrators can access is limited to:**

- i. Working copies of Confidential Data that may be held on BIDS personnel desktops or in email

### **c. Additional Information**

- i. IT desktop support personnel;
- ii. No direct access to the BIDS ATS trading systems

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**Part III: Manner of Operation**

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**Item 4: Hours of Operations**

- a. Provide the days and hours of operation of the NMS Stock ATS, including the times when orders or trading interest can be entered on the ATS, and any hours of operation outside of regular trading hours.

The BIDS ATS is open for trading during regular market hours (9:30 a.m. ET to 4:00 p.m. ET unless there is an early close due to a holiday, in which case the close is 1:00 p.m. ET) on the days that the U.S. stock exchanges are open. The BIDS ATS does not execute trades when U.S. stock exchanges are not operating.

Firm orders ~~and~~ Conditionals, and AIOIs may be entered on the BIDS ATS starting at 6:15 a.m. ET on trading days. Any Firm order ~~or~~ Conditional, or AIOI remaining in the BIDS ATS is cancelled at the end of each trading day. The BIDS ATS will not accept Firm orders ~~or~~ Conditionals, or AIOIs outside of this window, and the BIDS ATS does not hold any Firm orders ~~or~~ Conditionals, or AIOIs overnight.

- b. Are the hours of operations the same for all Subscribers and the Broker-Dealer Operator? Yes X No ☐

If no, identify and explain any differences.

**Item 5:        Means of Entry**

- a.            **Does the NMS Stock ATS permit orders and trading interest to be entered directly into the ATS (e.g., via Financial Information eXchange (“FIX”) protocol, Binary)?**

**Yes X No ☐**

**If yes, explain the protocol that can be used to directly enter orders and trading interest into the ATS.**

Participants can access the BIDS ATS directly using version 4.2 of the FIX protocol. Through these FIX connections, Participants can send their algorithmic flow, route client orders, or submit manual Firm orders ~~or~~, Conditionals, and AIOIs using front-end interfaces to the BIDS ATS.

- b.        **If yes to Item 5(a), are the protocols required to be identified in Item 5(a) the same for all Subscribers and the Broker-Dealer Operator?**

**Yes X No ☐**

**If no, identify and explain any differences.**

- c.        **Are there any other means for entering orders and trading interest into the NMS Stock ATS (e.g., smart order router, algorithm, order management system, sales desk)?**

**Yes X No ☐**

**If yes, identify and explain the other means for entering orders and trading interest, indicate whether the means are provided through the Broker-Dealer Operator, either by itself or through a third-party contracting with the Broker-Dealer Operator, or through an Affiliate of the Broker-Dealer Operator, and list and provide a summary of the terms and conditions for entering orders or trading interest into the ATS through these means.**

BIDS makes available to all Participants a proprietary front-end user interface called BIDS Trader. BIDS Trader is a desktop application developed for Participants to manage and deliver: (i) U.S. equity Firm orders and Conditionals into the BIDS ATS and/or (ii) EU Conditionals into the Cboe LIS EU venue. BIDS Trader integrates with a Participant’s OMS or EMS to automatically synchronize the Participant’s OMS/EMS blotter with the BIDS Trader blotter. BIDS Trader is made available to all Participants; however, it is currently used only by Sponsored Firms.

To use BIDS Trader, a Participant must install software on the desktop computer of any BIDS Trader User. BIDS does not restrict the use of BIDS Trader by a Participant other than requiring that a Participant using BIDS Trader must have been approved by a Sponsor, and the Sponsor must set risk limits for the Sponsored Firm.

A BIDS Trader User can represent trading interest in the BIDS ATS as a Conditional for a potential match or deliver Firm orders to trade in the BIDS ATS. BIDS Trader also allows for message delivery between the BIDS ATS and each BIDS Trader User, such as invitations to trade or status of the execution (as described in Part III, Item 9), as well as a view of the BIDS Trader User's inventory of executions and of Firm orders and Conditionals represented in the BIDS ATS. BIDS Trader provides functionality that allows a BIDS Trader User to manually change price, minimum execution size requirements and other order attributes that are otherwise managed with FIX tags on automated orders delivered via a FIX connection. Apart from transmitting Firm orders and Conditionals to the BIDS ATS, BIDS Trader was adapted to also manage EU equity Conditionals for the Cboe LIS EU venue. From a single BIDS Trader interface, a BIDS Trader User can submit Firm orders and Conditionals to the BIDS ATS and EU Conditionals to the Cboe LIS EU venue. BIDS Trader allows BIDS Trader Users to respond to invitations from either venue. BIDS Trader also provides the sole means by which Sponsored Firms can receive and respond to AIOs submitted through the BIDS ATS by Sponsors (as described in Part III, Item 9). Sponsors submit AIOs through the BIDS ATS via a FIX connection. BIDS can configure Sponsored Firms using BIDS Trader with access to the BIDS ATS only, the Cboe LIS EU venue only, or both venues.

The specification details regarding the integration of BIDS Trader with a Participant's OMS/EMS vary from vendor to vendor. The integrations are implemented using OMS/EMS-specific FIX or non-FIX transactions. For example, some vendors require integration via a web services interface which is considered non-FIX. Integration communication is done via controlled network connections to ensure that the full quantity needed to support the Firm order is solely committed to the BIDS ATS and not concurrently committed elsewhere so as to avoid over-execution.

BIDS Trader offers functionality that, to the extent used, is designed to streamline a BIDS Trader User's interaction with the BIDS ATS. All such functionality is sited in the user interface and a BIDS Trader server facility. Further, the use of BIDS Trader to transmit a Firm order or Conditional to the BIDS ATS does not in any way result in that Firm order or Conditional receiving priority or otherwise affect how the BIDS ATS prioritizes these versus other Firm orders or Conditionals (e.g., there is no preference to Firm orders or Conditionals received from a BIDS Trader User).

BIDS Trader is not required for Sponsored Firms to access the BIDS ATS, and BIDS Trader can be used without accessing the BIDS ATS (e.g., to access Cboe LIS). BIDS does not offer or maintain any additional means for entering orders or trading interest into the BIDS ATS, such as a proprietary smart order router or trading algorithms.

- d. **If yes to Item 5(c), are the terms and conditions required to be identified in Item 5(c) the same for all Subscribers and the Broker-Dealer Operator?**

Yes ☒ No ☐

**If no, identify and explain any differences.**

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**Item 7:        Order Types and Attributes**

- a. Identify and explain each order type offered by the NMS Stock ATS. In your explanation, include the following:**
- i.     priority, including the order type's priority upon order entry and any subsequent change to priority (if applicable); whether and when the order type can receive a new time stamp; the order type's priority vis-à-vis other orders on the book due to changes in the NBBO or other reference price; and any instance in which the order type could lose execution priority to a later arriving order at the same price;**
  - ii.    conditions, including any price conditions (e.g., how price conditions affect the rank and price at which it can be executed; conditions on the display or non- display of an order; or conditions on executability and routability);**
  - iii.   order types designed not to remove liquidity (e.g., post-only orders), including what occurs when such order is marketable against trading interest on the NMS Stock ATS when received;**
  - iv.    order types that adjust their price as changes to the order book occur (e.g., price sliding orders or pegged orders) or have a discretionary range, including an order's rank and price upon order entry and whether such prices or rank may change based on the NBBO or other market conditions when using such order type; when the order type is executable and at what price the execution would occur; whether the price at which the order type can be executed ever changes; and if the order type can operate in different ways, the default operation of the order type;**
  - v.     whether an order type is eligible for routing to other Trading Centers;**
  - vi.    the time-in-force instructions that can be used or not used with each order type;**
  - vii.   the circumstances under which order types may be combined with another order type, modified, replaced, canceled, rejected, or removed from the NMS Stock ATS; and**
  - viii.   the availability of order types across all forms of connectivity to the NMS Stock ATS and differences, if any, in the availability of an order type across those forms of connectivity.**

The BIDS ATS accepts ~~both~~ (i) Firm orders ~~and~~ (ii) Conditionals and (iii) AIOIs. Firm orders are executable according to the order specifications. Conditionals, which are described in Part III, Item 9, are trading interests that have the same general attributes of a Firm order except that they are not executable. A Trader must always replace (“firm-up”) its Conditional with a Firm order before it can be executed. If an invitation interaction, as described in Part III, Item 9, ends with Firm orders on both sides that satisfy each other’s terms and the trade meets applicable regulatory requirements, then a trade will occur. Traders may modify, replace, or cancel a Firm order at any time before execution.

Conditionals are discussed in Part III, Item 9; however, unless otherwise noted, the order types and attributes described below apply to both Firm orders and Conditionals. A Trader may modify, replace, or cancel a Conditional at any time prior to an invitation. Once an invitation is received, the Trader may either “firm-up” the Conditional or cancel or ignore the invitation as described in Part III, Item 9.

AIOIs, which are described in Part III, Item 9, may be sent through the BIDS ATS as a firm AIOI or a conditional AIOI by Sponsors to their designated Sponsored Firms that use BIDS Trader under terms agreed to by the parties (e.g., BIDS Trader Users can choose whether or not to receive AIOIs from Sponsors). All AIOIs and AIOI messaging pass through the BIDS ATS; however, neither the AIOI message nor the response interact with other Firm orders or Conditionals in the BIDS ATS order book. The Sponsor submitting an AIOI does not know what symbols exist on any BIDS Trader User’s blotter. Once an AIOI is received by the BIDS Trader User, the BIDS Trader User may send a message to the BIDS ATS accepting the AIOI on its terms, accepting the AIOI with modified terms (e.g., price terms, quantity, minimum), or declining it, or the BIDS Trader User can ignore the AIOI. If the BIDS Trader User responds to an AIOI by accepting it and the terms on both sides match, a firm AIOI is executed immediately by the BIDS ATS. If the originating AIOI was conditional and the BIDS Trader User responds to the AIOI by accepting it, the BIDS ATS sends the Sponsor a notification to firm-up. Once the Sponsor firms-up the AIOI, the BIDS ATS executes the trade. Any resulting trades may execute at, within, or outside the NBBO as agreed to by both parties to the trade. Executions outside the NBBO would initiate an intermarket sweep order (“ISO”) as described in Part III, Item 9.

### Firm Order and Conditional Order Types

The following Firm order and Conditional order types are accepted by the BIDS ATS:

- (i) limit order, a Firm order or Conditional with a limit price and a peg defaulted using the Trader’s default preference for Price Protection as described below;
- (ii) market order, a Firm order or Conditional with no limit price and a peg defaulted using the Trader’s default preference for Price Protection as described below;
- (iii) midpoint peg order, which is a priced or unpriced Firm order or Conditional that is pegged to the midpoint of the NBBO;
- (iv) market peg order, which is a priced or unpriced Firm order or Conditional pegged to the opposite side of the market, either at the inside quote or with an offset amount to make the resulting price more or less aggressive; or
- (v) primary peg order, which is a priced or unpriced Firm order or Conditional pegged to the

same side of the market, either at the inside quote or with an offset amount to make the resulting price more or less aggressive.

All Firm orders and Conditionals in the BIDS ATS are peg orders in nature and therefore each Firm order and Conditional entered into the BIDS ATS has an explicit order term referred to as “Price Protection” for capturing the type of pegging (i.e., Midpoint, Market, or Primary) for that particular Firm order or Conditional. A Firm order or Conditional entered into the BIDS ATS as a market or limit order may be set to any of the three peg types. The peg type may be explicitly specified for a particular Firm order or Conditional using a custom FIX tag, or otherwise determined by the Trader’s default preference for Price Protection (defaults allowed are Midpoint and Market) set by the Trader. All Firm orders or Conditionals submitted by a BIDS Trader User will always have the peg type specifically set by the BIDS Trader User or his or her default for Price Protection (Midpoint or Market). Consequently, a Firm order or Conditional submitted simply as a “limit order” or a “market order” without an explicit peg type will be accepted and default to the Trader’s default preference for Price Protection.

The BIDS ATS determines trade and invitation prices based on NBBOs calculated as described in Part III, Item 23. See Part III, Item 11 for more information on how tradeable prices are determined for different Price Protection terms.

### AIOI Order Types

The following AIOI order types are accepted by the BIDS ATS:

- (i) peg (i.e., Midpoint, Market, or Primary) with or without an offset. If the offset is zero or no offset is provided, the execution can only occur at or between the NBBO. If the offset is non-zero, the execution may occur outside the NBBO depending on the peg instruction and the offset value;
- (ii) peg with a limit, same as (i), but the execution price will not exceed the limit price;
- (iii) limit only, the execution price will not exceed limit price, but may be outside the NBBO.

If no pricing or pegging information is provided on the AIOI, the pegging instructions are determined by the Trader’s default preference for Price Protection (defaults allowed are Midpoint and Market) set by the Trader.

### AIOI Acceptance

If a BIDS Trader User accepts an AIOI from a Sponsor, the acceptance may include a limit price, and BIDS Trader will always set a default AIOI Price Protection based on the BIDS Trader User’s AIOI Price Protection setting (i.e., allow outside NBBO, or do not allow outside NBBO).

### Minimum Attributes for Firm Orders

All Firm orders submitted to the BIDS ATS must include the following minimum order attributes

or the Firm order will be rejected by the BIDS ATS:

1. Symbol
2. Price (discussed above in this item)
3. Side (buy, sell or sell short)
4. Size
5. Capacity (agency or principal)
  - a. Subscribers are responsible for assigning the appropriate capacity to their Firm orders and Conditionals
  - b. All Firm orders and Conditionals submitted by a Sponsored Firm are designated as agency

Minimum attributes for Conditionals and AIOIs are described in Part III, Item 9.

### **Additional Order Attributes**

All Traders may include a variety of additional attributes on an order-by-order basis or as a default setting. These additional attributes include:

#### **Time-in-Force**

The BIDS ATS supports the following time-in-force (“TIF”) types:

- (i) Good-til-day (“Day”)
- (ii) Good-til-time (“GTT”) (time designation must be within the same trading day that the Firm order or Conditional is entered)
- (iii) Execute-and-cancel (“ENC”)
- (iv) Immediate-or-cancel (“IOC”) (Firm order)

Firm orders ~~and~~, Conditionals, and AIOIs may be designated with a specified TIF for resting in the BIDS ATS matching book. Firm orders ~~and~~, Conditionals, and AIOIs entered without a specified TIF will be designated with the Trader’s default TIF preference (Day, GTT, ENC); if the Trader has not changed the default TIF preference, the Firm order ~~or~~, Conditional, or AIOI will initially default to a Day ~~order~~ TIF. Regardless of TIF, any Firm order ~~or~~, Conditional, or AIOI remaining in the BIDS ATS will be cancelled at the end of the trading day.

Firm orders ~~and~~, Conditionals, and AIOIs designated as ENC may specify an optional expiry time. If ~~an ENC~~ a Firm order or a firm AIOI has an ENC TIF and does not trade its total available volume after the initial execution, the remaining quantity is cancelled. If ~~the ENC~~ a Firm order or a firm AIOI has an ENC TIF and an expiry time and does not trade at all, it will terminate at the expiry time. Because Conditionals or conditional AIOIs are not executable, the ENC TIF has no practical application for Conditionals or conditional AIOIs. The BIDS ATS will not reject Conditionals or conditional AIOIs entered with an ENC TIF designation; rather, the ENC TIF designation on the Conditional or conditional AIOI will be treated as a Day TIF or, if an expiry time is specified, a GTT TIF. All open Firm orders ~~and~~, Conditionals, and AIOIs are cancelled at

the market close.

The BIDS ATS will reject Conditionals [and conditional AIOIs](#) with an IOC TIF.

## **Minimum Volume**

### *Automatch Minimum Volume*

Any Firm order submitted to the BIDS ATS may set a minimum volume that specifies the minimum quantity every trade involving the Firm order must meet. Where two Traders have each set a minimum volume, any resulting transaction between those two Firm orders must have a volume greater than or equal to the highest minimum volume between the two Firm orders. A mixed-lot automatch minimum volume will be rounded down (note: the BIDS ATS trades are at least one round lot).

### *Invitation Minimum Volume*

Traders may also specify a minimum quantity that every invitation related to a Firm order or Conditional must meet. A Firm order using this minimum will only issue an invitation to a contra-party Conditional that is greater than or equal to the required amount. A Conditional using this minimum will only issue or receive an invitation to or from a contra-party Conditional that is greater than or equal to the required amount. See Part III, Item 9 for a discussion of Conditionals and invitations.

As is the case with automatch minimum volume, an invitation minimum volume that is a mixed-lot amount will automatically be rounded down (note: the BIDS ATS invitations are at least one round lot).

## **Automatch and Invitation Minimum Volume designations may be specified on AIOIs.**

### *Additional Volume Preferences*

Traders may supplement minimum volume requirements with the following preferences:

#### *1. Volume Aggregation*

A Trader may permit trade aggregation for the purpose of meeting its automatch minimum volume requirement. If a Trader enables aggregation, a Firm order from this Trader may trade when it has the aggressive-order status (see Continuous Matching in Part III, Item 11 for definition of aggressive status), with more than one passive Firm order each of which includes volume below the automatch minimum, but the total of which is greater than or equal to the automatch minimum. Each such trade must meet the contra-party's automatch minimum volume, if any.

## **Volume aggregation is not available on AIOIs**

#### *2. Minimum Volume for Principal Flow*

A Sponsored Firm's individual trader may also set a preference called "Minimum Volume for Principal Flow". With this preference, the Sponsored Firm's Firm order or Conditional will only trade/interact with principal capacity Firm orders or Conditionals that have the required minimum quantity. [Minimum Volume for Principal Flow may also be set for AIOIs.](#)

### **Contra-party Capacity**

A Sponsored Firm's individual trader may designate whether his or her Firm order or Conditional may interact with Firm orders or Conditionals that indicate principal capacity. By default, all Sponsored Firm's individual trader's Firm orders and Conditionals only interact with agency capacity Firm orders or Conditionals; however, this default can be overridden at the order level or the Sponsored Firm level at the direction of the Sponsored Firm. [This designation is not available on AIOIs.](#)

### **Filter Level**

A Trader can specify a BIDS Scorecard level that a potential contra-party must achieve in order to interact with a particular Firm order or Conditional. As discussed more fully in Part III, Item 9, BIDS scores Traders submitting Conditionals based on their performance in responding to invitations to firm-up. A Trader may set a filter ("Filter") to prevent invitations from being sent to contra-parties that have BIDS Scorecard levels below the Filter.

A Trader sets the Filter level to one of three levels (the "benchmark settings" refer to a variety of proprietary metrics that are calculated for each Trader based on his or her long-term and short-term behavior):

- (i) Aggressive - allowing invitation to any potential contra-party, regardless of that contra-party's Scorecard score
- (ii) Normal – permitting interaction with all contra-parties except for poor performing contra-parties (no invitations sent to Traders with scores worse than Normal benchmark settings); and
- (iii) Conservative – invitations not sent to Traders with scores worse than the Conservative benchmark settings

BIDS cannot override a Trader's Filter settings. BIDS, at its discretion, may change the benchmark settings for the different Filter levels. [Filter settings do not apply to AIOIs.](#)

### **Invite Mode**

A Trader may specify which type(s) of contra Conditionals a Firm order or Conditional may invite. The available Invite Mode options include:

1. ON – no restriction, the Firm order or Conditional can interact with any type of contra Conditionals
2. OFF – do not interact with contra Conditionals at all
  - a. A Firm order using "OFF" will only trade with contra Firm orders
  - b. This Invite Mode is only available for Firm orders

- c. A Conditional using “OFF” will be rejected
3. Auto-only – the Firm order or Conditional will only interact with contra Conditionals that do not involve a human trader seeing an invitation and deciding whether to firm up or not.

**Invite Mode does not apply to AIOIs.**

### **Intra-firm Priority**

A Subscriber may designate that Firm orders and Conditionals have a priority for interacting with contra Firm orders and Conditionals that are from the same order source. This order preference applies to both invitations and trades. See Part III, Item 11 for a discussion of Intra-firm Priority.

**Intra-firm Priority designation does not apply to AIOIs.**

### **Hosted Pools**

A Subscriber may designate that Firm orders and Conditionals interact only with others from the same group by setting up a Hosted Pool. See Part III, Item 14 for a discussion of Hosted Pools.

**AIOIs are not available for use in Hosted Pools.**

### **Attributes of Conditionals Only**

Traders may use certain attributes related to firming-up that are only applicable to Conditionals (e.g., Regular FirmUp Conditional, Auto FirmUp Conditional, Dual Conditional). These attributes affect a Trader’s interaction with Conditionals and invitations to firm-up and are discussed in Part III, Item 9 under the Conditional Types and Firm-Up Mode section. **These attributes are not available on AIOIs.**

### **Routing Instruction**

The BIDS ATS only routes Firm orders (it does not route Conditionals) at the direction of a BIDS Trader User. See Part III, Item 16 for a discussion of order routing. **Routing instructions are not available on AIOIs.**

- b. **Are the terms and conditions for each order type and attribute the same for all Subscribers and the Broker-Dealer Operator?**

Yes ☒ No ☐

**If no, identify and explain any differences.**

## **Item 8: Order Sizes**

- a. **Does the NMS Stock ATS require minimum or maximum sizes for orders or trading interest?**

Yes ☒ No ☐



**If yes, specify any minimum or maximum order or trading interest size requirements and any related handling procedures.**

All Firm orders ~~and~~, Conditionals, and AIOIs submitted to the BIDS ATS must be greater than or equal to a round lot for the security. The BIDS ATS will reject any Firm orders ~~or~~, Conditionals, or AIOIs that do not meet this minimum requirement. As an exception to this minimum requirement, the BIDS ATS accepts odd-lot Firm orders under the specific circumstances described in Item 8(c).

BIDS does not place restrictions on the maximum size of an order, but BIDS does effectuate maximum size or value constraints established by a Subscriber (acting for itself or as Sponsor for a Sponsored Firm). The BIDS ATS will reject any Firm orders that exceed the maximum size or value restriction established by a Subscriber.

- b. If yes to Item 8(a), are the requirements and procedures required to be identified in Item 8(a) the same for all Subscribers and the Broker-Dealer Operator?**

Yes ☒ No ☐

**If no, identify and explain any differences.**

- c. Does the NMS Stock ATS accept or execute odd-lot orders?**

Yes ☒ No ☐

**If yes, specify any odd-lot order requirements and related handling procedures (e.g., odd lot treated the same as round lot).**

A BIDS Trader User may submit an odd-lot Firm order for approval to execute the odd-lot balance of an OMS/EMS parent order (same symbol and same side) that has traded in the BIDS ATS on the current trading day on Firm orders submitted by that BIDS Trader User. The BIDS ATS will, in its discretion, either approve and execute this odd-lot Firm order at the last trade price by the BIDS Trader User for that symbol and side or reject it. The BIDS ATS may not approve an odd-lot Firm order if, for example, there was not a previous execution for the BIDS Trader User on the BIDS ATS in that symbol on the same side on the same day or may reject an odd-lot Firm order based on its consideration of the number or frequency of requests to execute odd lots.

BIDS sends this odd-lot trade to BOFA Securities, Inc. ("BOFA") for clearance and settlement. Because execution of an odd-lot Firm order does not involve two Sponsors (i.e., there is not an offsetting Firm order from another Sponsor against which the odd-lot Firm order crossed), this creates a position for BIDS within its odd-lot account at BOFA because the BIDS ATS executed the odd-lot with only one Sponsor. BIDS then sends out a market order to trade out of this position through the BOFA FIX connection. BOFA will report this fill to the clearing arm which will then flatten out the position that had been created.

- d. If yes to Item 8(c), are the requirements and procedures required to be identified in Item 8(c) the same for all Subscribers and the Broker-Dealer Operator?**

**Yes X No ☐**

**If no, identify and explain any differences.**

- e. Does the NMS Stock ATS accept or execute mixed-lot orders?**

**Yes X No ☐**

**If yes, specify any mixed lot order requirements and related handling procedures (e.g., mixed lot treated the same as round lot).**

For Sponsored Firms, mixed lots entered into the BIDS ATS participate in the matching process with the same order interaction priorities as round lots. The BIDS ATS will only match a round-lot portion of the mixed lot and any corresponding invitation to firm-up will be for a round lot. The remaining odd lot (the “tag-end”) associated with the mixed lot may either be cancelled by the BIDS ATS or auto-filled using the last fill price to the extent that the Trader has set that as a preference.

If the Trader has elected to auto-fill the tag-end, BIDS sends the odd-lot trade to BOFA for clearance and settlement. Because execution of the tag-end does not involve two Sponsors (i.e., there is not an offsetting Firm order from another Sponsor against which the odd-lot Firm order can cross), this creates a position for BIDS within its odd-lot account at BOFA because the BIDS ATS executed the odd-lot with only one Sponsor. BIDS then sends out a market order to trade out of this position through the BOFA Securities FIX connection. BOFA will report this fill to the clearing arm which will then flatten out the position that had been created.

The rules involving mixed-lot orders apply equally to all Sponsored Firms. Only Traders with Sponsored Firms may elect to auto-fill a tag-end; this functionality is not available to Subscribers.

- f. If yes, to Item 8(e), are the requirements and procedures required to be identified in 8(e) the same for all Subscribers and the Broker-Dealer Operator?**

**Yes X No**

**If no, identify and explain any differences.**

**Item 9: Conditional Orders and Indications of Interest**

- a. Does the NMS Stock ATS send or receive any messages indicating trading interest (e.g., IOIs, actionable IOIs, or conditional orders)?

Yes ☒ No ☐

If yes, identify and explain the use of the messages, including information contained in messages (e.g., price or size minimums), how the message is transmitted (e.g., order management system, smart order router, FIX), when the message is transmitted (e.g., automatically by the ATS, or upon the sender's request), the type of Persons that receive the message (e.g., Subscribers, Trading Centers), responses to conditional orders or IOIs (e.g., submission to firm-up conditional orders), and the conditions under which the message might result in an execution in the ATS (e.g., response time parameters, interaction, and matching).

**Conditionals**

The BIDS ATS accepts Conditionals as part of its workflow. Conditionals are non-tradeable messages ~~that~~. As described below, conditional AIOIs submitted through the BIDS ATS by a Sponsor to Sponsored Firms using BIDS Trader are also non-tradeable messages but differ from Conditionals. Conditionals include information about trading interest known only to the BIDS ATS matching engine and not to potential counterparties or other third parties. Unlike Firm orders, Conditionals require additional actions prior to an execution on the BIDS ATS. The BIDS ATS uses the information in the Conditional to locate a potential counterparty. The potential counterparty may be a Trader that has also submitted a Conditional or one that has submitted a Firm order.

The shares behind a Conditional are not committed to the BIDS ATS and, therefore, can be executed away from the BIDS ATS while still in the conditional state.

The BIDS ATS does not broadcast information in connection with Conditionals, it only sends directed signals ("invitations") to the Trader on the invitation (i.e., the owner of the invited Conditional), as discussed further below. Conditionals interact on a one-to-one basis, share for share. When an aggressive Conditional is invited (see "Continuous Matching" in Item 11(c) for a definition of "aggressive"), it is typically tied to one contra passive order. However, if the size of the aggressive Conditional exceeds the size of the contra passive order, the invitation can be associated with more than one contra passive order, so long as the aggressive Conditional volume is greater than or equal to the total volumes of these contra passive orders, and each passive order's volume meets the invitation minimum volume requirement of the aggressive order.

**Submission of Conditionals**

Conditionals may be submitted to the BIDS ATS through any of the available means of entry set forth in Part III, Item 5. Once submitted, all Conditionals are treated the same under the priority rules of the BIDS ATS matching engine.

A Conditional must contain the following attributes:

1. Symbol
2. Side
3. Price terms
4. Quantity

These attributes are used by the BIDS ATS matching engine to identify a potential counterparty for the Conditional.

### **Invitations**

When the BIDS ATS matching engine identifies a potential counterparty to a Conditional, BIDS issues an invitation to trade to that Trader if that Trader's Conditional and the counterparty's Firm order or Conditional have met all requirements of each other. Invitations are strictly anonymous, and a Trader receiving an invitation does not know the identity of the potential counterparty or the size of the counterparty's Firm order or Conditional. The information available to the invited party is only that a potential counterparty meets the price terms and invitation minimum volume requirement of the Trader's Conditional. Once a Trader receives an invitation, the Trader may either: (i) "firm-up", which has the effect of replacing the Conditional with a Firm order, or (ii) cancel or ignore the invitation, which effectively declines the invitation.

Invitations are communicated in the following manner:

- (i) FIX: a FIX update event to the Conditional is sent signaling that it has been invited
- (ii) BIDS Trader: an invitation dialog is presented to the Trader

Invitations are sent only to the Trader that submitted the Conditional.

During any time that an invitation is active, the overlapping quantity of shares that matched for the purpose of the invitation are committed to that invitation. As a result, the committed quantity cannot be traded by either Trader elsewhere once a Trader receives an invitation, nor can that quantity be used to generate another invitation. This state is maintained and the shares remain committed to the invitation until they are executed or until the invitation is cancelled or otherwise fails. An invitation only commits the overlapping share quantity and the particular Firm orders or Conditionals of the Traders that are potential counterparties.

### **Firm-Up**

To convert a Conditional into a Firm order that is executable in the BIDS ATS, the recipient of an invitation must "firm-up" the Conditional. The process of firming up requires:

- (i) FIX: the recipient (whether automated or manual) sends a regular Firm order complete with price and size terms, plus a reference to the order ID of the invited Conditional

- (ii) BIDS Trader: the recipient must either act to firm-up the invitation within the invitation dialog on BIDS Trader, or have submitted the invited Conditional as an Auto FirmUp (“AFU”) Conditional in the first place (see FirmUp Mode below for details), in which case BIDS Trader will automatically firm-up the invited Conditional.

The resulting Firm order is then executed on the BIDS ATS with the counterparty to the invitation as the other side of the transaction, provided that the Firm order continues to meet the requirements of the contra order that invited the Conditional and any regulatory requirements are satisfied (Please see discussion in Part III, Item 11(c) below). If either side fails to firm up its Conditional in response to an invitation within a specified time, no transaction occurs. Any time a Trader fails to firm-up its Conditional in response to an invitation, the Conditional related to the invitation is cancelled by the BIDS ATS.

The firm-up may contain the same attributes (price and size) as the Conditional, or the Trader may change the attributes in the firm-up process. To the extent that a Trader changes the attributes, an execution will only occur if the contra-party’s corresponding attributes will still be met. If the invitation for a firm-up is concluded, either successfully in a trade or failed, and the firm-up has remaining quantity, it is free to trade or interact with other counter-parties before it expires based on its TIF, or it gets cancelled by the Trader or by the BIDS ATS.

The BIDS ATS applies time limits for responding to an invitation. As a result, a Trader will be “timed out” if it fails to respond to an invitation within the time limit, and the BIDS ATS will terminate the invitation. The time limits are set uniformly by BIDS depending on whether the Trader is an automated Trader or a manual Trader. The time limit is currently two (2) seconds for automated Traders and thirty (30) seconds for manual Traders. The permitted response time for manual Traders is longer than for automated Traders to account for the manual action needed for a human Trader to respond. At its discretion, BIDS may adjust these response time limits from time-to-time without notification to Participants. [There is no time limit for response to an AIOI.](#)

When two Conditionals interact, the BIDS ATS does not always invite both Conditionals simultaneously. The BIDS ATS considers the source and the type of Conditional (e.g., a BIDS Trader regular Conditional vs an algorithmic), and if the BIDS ATS determines that the two sides will be very unlikely to firm-up and rest on book within the same time window, it will invite the “slower” side first, and only invite the “faster” side when the slower side has firmed-up (and the interaction will proceed). The “slower” side for this purpose may be: (i) a manual Trader when interacting with an automated Trader; or (ii) an automated Trader that is known to have a response latency that is slower than the norm.

An automated Trader may request that BIDS set it up such that it will receive FIX notifications of situations where it is the inviting party but has not yet been invited.

### **Conditional Types and FirmUp Mode**

A Trader submitting Conditionals can select the manner in which it responds to an invitation. For this purpose, the BIDS ATS permits Traders to set the firm-up mode in connection with Conditionals and uses the term “FirmUp Mode” to describe these attributes. If the FirmUp Mode

is not explicitly specified by a Trader on a particular Conditional, the default preference mode of Regular FirmUp will be used.

There are three possible options for FirmUp Mode, each of which is described below:

1. Regular FirmUp (RFU) Conditional

In Regular FirmUp Mode, the manual sender of the Conditional will be notified of the invitation to make the firm-up decision and will make a decision in response to each invitation.

- a. Regular FirmUp Mode is meaningful for non-automated Conditionals only. For automated Conditionals, it is always up to the automated engine to respond to invitations.

2. Auto FirmUp (AFU) Conditional

Traders can use AFU Conditionals to tell the BIDS ATS that the Conditional will be automatically firmed-up in response to any invitation, without the submitting Trader being notified of invitations.

- a. BIDS Trader Users may send in AFU Conditionals to the BIDS ATS, and the BIDS Trader terminal will firm up Conditionals in response to invitations automatically on the Trader's behalf.
- b. Non-automated order sources other than BIDS Trader also may use this AFU Conditional capability for Conditionals that will be firmed up automatically when invited.

For AFU Conditionals, Traders can enable a feature that, if the contra is below a configured threshold set by the Trader sending the Conditional, then the received invitation is only for the configured size. For example, AFU could be set for 5,000 shares meaning that if the contra order does not exceed 5,000 shares, the AFU invitation will only be for 5,000 shares instead of for the full Conditional size. This permits a Trader to set a lower minimum quantity requirement and capture smaller block trades using the low touch AFU workflow.

3. Dual Conditional

A Dual Conditional is a Conditional with both RFU and AFU attributes. Using Dual Conditional, a BIDS Trader User provides complete and independent price and volume terms for each attribute.

- a. A Dual Conditional may be applied by a BIDS Trader User seeking to respond differently depending on the attributes of the Firm order or Conditional that caused the invitation. Dual Conditional permits AFU where certain price and/or volume terms are met but requires a manual firm-up (RFU) where the alternative

price and/or volume terms exist.

- b. Dual Conditionals are only available to users of the BIDS Trader terminal.
- c. See Part III, Item 11 below for a description of how the BIDS ATS processes Dual Conditionals during the invitation cycle.

### **BIDS Scorecards**

The BIDS Scorecard is a proprietary and comprehensive methodology for grading the performance of an individual Trader (or, in the case of a firm's algorithmic order flow, a Participant) in responding to invitations to trade. There are multiple factors that go into the systematic scoring for Scorecards; however, the key factors used to generate the Scorecard score are the Trader's firm-up response rate and whether the Trader changes price or size terms in its firm-up responses. The Scorecard thus provides a measurement of the terms of the firm-up relative to the terms of the initiating Conditional. Based on these factors, a Trader that frequently responds to invitations on the same terms in its Conditionals will have a high score. By contrast, a Trader that consistently ignores invitations to trade, or responds to invitations with worse price or size terms than in the original Conditional, will have a low score. For example, if an invited Conditional is unpriced, and the firm-up has a limit price that is not readily marketable, a low score will be assigned. In addition to long-term statistical scores, a Trader's performance in a particular symbol on a given day (either positively or negatively) will be considered and given greater weight in determining their interaction on that day and the following day in that particular symbol.

BIDS assigns notional scores to new Traders who have not yet established their long-term statistical scores for an initial period after they commence trading. These notional scores are based on the historic average of Scorecard scores for new Traders in BIDS (and may be adjusted periodically if those historic averages change).

The BIDS Scorecard methodology is strictly confidential and applied uniformly to all similarly situated Traders submitting Conditionals. BIDS does not disclose Scorecard values to Traders, however, BIDS staff may discuss the Scorecard process and the individual behavior that is affecting a Trader's own score if, for example, a Trader has a question or concern regarding his or her Scorecard score. BIDS' client service team will also periodically review and discuss an individual Trader's, or in the case of a firm's algorithmic order flow, a Participant's, scorecard performance with that individual Trader or Participant as a part of ongoing account maintenance. Based on the factors described above, BIDS regularly reviews and updates a Trader's Scorecard score to reflect more recent activity. Under certain circumstances, BIDS may reset a Trader's Scorecard score if BIDS determines that the score may not accurately reflect the Trader's activity (e.g., due to misunderstanding or incorrect use of the invitation process).

BIDS may adjust its Scorecard methodology from time-to-time without notifying Participants. Any such adjustments will apply uniformly to all Participants.

**[AIOI performance is not included in BIDS Scorecards.](#)**

As discussed in Part III, Item 7, BIDS makes available Filter settings that allow Traders to prevent invitations to Traders with low Scorecard scores.



## Actionable IOIs (“AIOIs”)

AIOIs are available to Sponsors and their Sponsored Firms who use BIDS Trader. The BIDS AIOI allows Sponsors, at their discretion, to send AIOI messages via FIX, through the BIDS ATS, to their Sponsored Firms who have agreed to receive AIOIs from that Sponsor, with terms agreed to by the parties. Sponsors can create lists of Sponsored Firm counterparties and if those counterparties agree to receive AIOIs from that Sponsor, the relationship is created which allows for AIOI messages to be transmitted and replied to. The Sponsor can determine which Sponsored Firm counterparties on its list will receive AIOIs on a symbol by symbol basis and may offer different terms to different Sponsored Firms, even within the same symbol. The Sponsor may also set prioritization for the order in which its AIOIs are distributed. For example, the Sponsor may initially send an AIOI to some BIDS Trader Users with higher response rates, and then send unmatched AIOIs to other BIDS Trader Users that have lower response rates at a later time. A Sponsor can set a threshold using response rates calculated by the BIDS ATS, which tracks how often each BIDS Trader User receives an AIOI but does not respond.

An AIOI message must contain the following attributes:

1. Symbol
2. Side
3. Price terms
4. Quantity
5. Capacity

If no pricing or pegging information is provided on the AIOI, the pegging instructions are determined by the default preference for Price Protection (defaults allowed are Midpoint and Market) set by the Trader at the Sponsor. An AIOI received by a BIDS Trader User is distinguishable from a regular BIDS ATS invitation by color and by the phrase “ACTIONABLE IOI” on the invitation. Any invitation from a Conditional in the same symbol as an AIOI will appear on the BIDS Trader User’s screen before an AIOI in that symbol. The Sponsor sending the AIOI will be identified on the AIOI pop-up and will be the Sponsor on any execution resulting from that AIOI. Only one BIDS Trader User may interact with an AIOI at a time, and AIOI messaging in response to the AIOI is done on a time priority (i.e., first-come first-serve) basis. Once an AIOI is received by the BIDS Trader User, the BIDS Trader User may send a message to the BIDS ATS accepting the AIOI on its terms, accepting the AIOI with modified terms (e.g., price terms, quantity, minimum), or declining it, or the BIDS Trader User can ignore the AIOI. If the BIDS Trader User responds to an AIOI by accepting it and the terms on both sides match, a firm AIOI is executed immediately by the BIDS ATS; the execution price is determined at the time the BIDS ATS receives the AIOI acceptance. If the originating AIOI was conditional, the BIDS ATS sends the Sponsor a notification to firm-up. If the Sponsor firms-up the AIOI, the BIDS ATS executes the trade; the execution price is determined at the time the BIDS ATS receives the AIOI firm-up. If the Sponsor does not firm-up, both the AIOI and the acceptance are cancelled. Neither the AIOI message nor the response interact with other Firm orders or Conditionals in the BIDS ATS order book. AIOI acceptances only interact with the initiating

AIOI message. There is no time limit for the BIDS Trader User to respond to an AIOI. BIDS imposes a time limit on the Sponsor to respond to an AIOI firm-up notification, which is currently two (2) seconds.

BIDS Trader provides messaging capabilities that allow for bi-lateral negotiation and executions resulting from AIOI messaging, and any resulting trades may execute at, within, or outside the NBBO as agreed to by both parties to the trade. Executions outside the NBBO would initiate an ISO. When an ISO is initiated by the BIDS ATS due to an execution outside the NBBO, the BIDS ATS will route an order to BOFA directed to Nasdaq with a Nasdaq MOPB order type. This will post and sweep all protected quotes as stipulated by Regulation NMS. The remaining shares will be cancelled back to the BIDS ATS and execute against the contra AIOI. To avoid routing the entire AIOI volume as an ISO, BIDS places a maximum size limit on the ISO. The size limit is determined by the minimum volume requirements imposed by the Participants and a restriction imposed by the BIDS system, which is currently set to 20,000 shares but can be adjusted by BIDS if necessary. If the ISO's quantity is not large enough to sweep all protected quotes, Nasdaq/BOFA will cancel the MOPB order without executing, and the AIOI match will not execute. The AIOI acceptance will be cancelled. (See Part III, Item 22 for more detail.)

- b. If yes to Item 9(a), are the terms and conditions governing conditional orders and indications of interest the same for all Subscribers and the Broker-Dealer Operator?

Yes ☒ No ☐

If no, identify and explain any differences.

**Item 10: Opening and Reopening**

- a. Explain how the NMS Stock ATS opens or re-opens for trading, including when and how orders and trading interest are priced, prioritized, matched, and executed, and identify any order types allowed prior to the start of regular trading hours or following a stoppage of trading in a security during regular trading hours.

Pre-opening

The BIDS ATS is open for trading during market hours (9:30 a.m. ET to 4:00 p.m. ET unless there is an early close due to a holiday, in which case the close is 1:00 p.m. ET) on any day that the U.S. stock exchanges are open. Firm orders ~~and~~, Conditionals, and AIOIs are accepted starting at 6:15 a.m. ET, prior to the opening of the U.S. markets at 9:30 a.m. ET.

The BIDS ATS does not conduct any matching processes or executions prior to the opening of the markets and the availability of the NBBO.

Opening

The BIDS ATS commences the opening process for each symbol once the primary market for that

symbol opens and upon receipt of the next event involving that symbol, which may be an order event or a market data event.

During the BIDS ATS opening process, the BIDS ATS uses the NBBO to determine the tradeable prices (see Part III, Item 11 for discussion of tradeable price) at which each Firm order and Conditional could trade such that:

1. All buy Firm orders and Conditionals are prioritized by tradeable price (high to low) and then, for those with the same price, by volume and then by time of entry.
2. All sell Firm orders and Conditionals are prioritized by tradeable price (low to high) and then, for those with the same price, by volume and then by time of entry.

The buy Firm orders and Conditionals with the highest price and the sell Firm orders and Conditionals with the lowest price are compared and the Firm order or Conditional with the earlier timestamp is dequeued and tagged as “aggressive” in the BIDS ATS (see Part III, Item 11). The aggressive order then goes through the trading and invitation cycles (as described in Part III, Item 11) in the same manner as a new aggressive Firm order or Conditional that had just entered the BIDS ATS. When this matching process is complete, the new top Firm orders and Conditionals of the two lists are compared again for the next aggressive Firm order or Conditional, continuing until the opening lists are exhausted.

#### Re-open

When trading in a symbol permitted to trade on the BIDS ATS is halted for any reason (e.g., regulatory trading halt or manual halt done by the BIDS ATS), the BIDS ATS cancels all Firm orders and Conditionals in its matching book as well as any AIOI messaging in that symbol and does not accept new Firm orders ~~or~~, Conditionals, or AIOIs in that symbol during the halt. All pending Firm orders, Conditionals, AIOIs, and firm-ups in that symbol will be rejected. At the time of resuming trading in a symbol after a halt, the BIDS ATS book for the symbol is empty.

BIDS may suspend trading across all symbols on the BIDS ATS as described in Part III Item 20. The BIDS ATS will not match Firm orders or Conditionals or execute trades resulting from AIOI messaging in any symbols until trading is resumed by BIDS. After resumption of trading, each symbol will be re-opened when a valid NBBO for that symbol is received by the BIDS ATS. At the time of re-opening a symbol, the BIDS ATS performs the same trading and invitation cycles as for the opening.

- b. Are the processes and procedures governing opening and re-opening the same for all Subscribers and the Broker-Dealer Operator?**

Yes ☒ No ☐

**If no, identify and explain any differences.**

- c. Explain how unexecuted orders and trading interest are handled at the time the NMS Stock ATS begins regular trading at the start of regular trading hours or following a stoppage of trading in a security during regular trading hours.**

Except as noted in Item 10(a) above, unexecuted Firm orders and uninvited Conditionals remain in the BIDS ATS order book following an Opening or Re-opening, and are eligible to trade or interact with contra-party Firm orders or Conditionals.

- d. Are the processes or procedures governing unexecuted orders and trading at the time the NMS Stock ATS begins regular trading at the start of regular trading hours, or following a stoppage of trading in a security during regular trading hours, the same for all Subscribers and the Broker-Dealer Operator?**

**Yes ☒ No ☐**

**If no, identify and explain any differences.**

- e. Are there any differences between pre-opening executions, executions following a stoppage of trading in a security during regular trading hours, and/or executions during regular trading hours?**

**Yes ☐ No ☒**

**If yes, identify and explain the differences.**

**Item 11: Trading Services, Facilities and Rules**

- a. Provide a summary of the structure of the NMS Stock ATS marketplace (e.g., crossing system, auction market, limit order matching book) and explain the means and facilities for bringing together the orders of multiple buyers and sellers on the NMS Stock ATS.**

The BIDS ATS operates a single limit order matching book during regular market hours (9:30 a.m. ET to 4:00 p.m. ET unless there is an early close due to a holiday, in which case the close is 1:00 p.m. ET) (see Part III, Item 4 Hours of Operation). The BIDS ATS generally trades all NMS stocks listed on a national securities exchange that are eligible for trading on the BIDS ATS on that day. BIDS may, in its sole discretion, stop trading certain symbols from time to time for, among other reasons, the purpose of remaining below the volume thresholds for (i) classification as an “SCI Entity” under Regulation SCI and (ii) certain regulatory requirements as set forth in Rules 301(b)(3) and (5) of Regulation ATS.

The BIDS ATS matching engine anonymously identifies potential counterparties based on the Firm orders and Conditionals that have been submitted by Participants into the BIDS ATS. The interaction of the Firm orders and Conditionals in the BIDS ATS matching engine is determined according to the rules discussed in Item 11(c) below. The BIDS ATS establishes all execution prices using the NBBO (see Part III, Item 23 for a discussion of the NBBO) at the time of the execution.

**Neither the AIOI message nor the response interact with other Firm orders or Conditionals in the BIDS ATS order book. AIOI acceptances only interact with the initiating AIOI message.**

Participants may submit Firm orders and Conditionals to the BIDS ATS using various methods of access as discussed in Part III, Item 5. Firm orders and Conditionals may be submitted beginning 6:15 a.m. ET on trading days through 4:00 p.m. ET on trading days.

- b. Are the means and facilities required to be identified in Item 11(a) the same for all Subscribers and the Broker-Dealer Operator?**

Yes ☒ No ☐

**If no, identify and explain any differences.**

- c. Explain the established, non-discretionary rules and procedures of the NMS Stock ATS, including order interaction rules for the priority, pricing methodologies, allocation, matching, and execution of orders and trading interest, and other procedures governing trading, such as price improvement functionality, price protection mechanisms, short sales, locked-crossed markets, the handling of execution errors, and the time-stamping of orders and executions.**

The BIDS ATS matches Firm orders and Conditionals based on the pricing methodologies, Firm order and Conditional attributes, and priority rules set forth below. AIOIs are bi-laterally negotiated and neither the AIOI message nor the response interact with other Firm orders or Conditionals in the BIDS ATS order book. AIOI acceptances only interact with the initiating AIOI message.

### Continuous Matching

Open Firm orders and Conditionals that are already entered into the BIDS ATS are referred to as “passive.” A new Firm order or Conditional entering the BIDS ATS book that is matchable against one or more of those passive Firm orders or Conditionals is called “aggressive.” The fill priority in the BIDS ATS is determined by the aggressive Firm order or Conditional. Traders may select “price/volume/time” or “volume/price/time” fill priorities with the default as price/volume/time. Where the fill priority of the aggressive Firm order or Conditional is “price/volume/time”, the matching sequence is the best price, and then volume and then time (if two or more Firm orders or Conditionals have the same price). If the fill priority of the aggressive Firm order or Conditional is “volume/price/time”, then the matching sequence is highest volume, and then price and then time (if two or more Firm orders or Conditionals have the same volume). In each case, the fill priorities of the passive Firm orders or Conditionals are not taken into consideration. As discussed below and in Part III, Item 7, certain Firm orders and Conditionals may use Intra-firm Priority to designate a specified source as part of its priority designation.

Aggressive Firm orders and Conditionals engage in the following matching sequences:

1. A Firm order goes through: (i) the automatching cycle, then (ii) the invitation cycle.
  - a. The automatching cycle compares the aggressive Firm order with passive Firm orders.
  - b. The invitation cycle compares the Firm order with passive Conditionals, which require an invitation and firm-up for execution.
2. A Conditional only goes through the invitation cycle.
  - a. The invitation cycle compares the Conditional with passive Firm orders as well as Conditionals.

Following an automatch, a Firm order that has remaining unexecuted volume that is greater than the Firm order’s minimum volume setting will remain eligible for execution at that remaining volume with the original minimum volume. Otherwise, the BIDS ATS will set the minimum volume to the unexecuted volume or cancel the Firm order, based on the default setting established by the Trader.

At any time that a Firm order or Conditional (or the portion of its volume) is tied to an invitation, the volume tied to the invitation is committed to the intended contra. As a result, that Firm order or Conditional (or the portion of its volume that is committed) is not eligible to trade/interact with other contras while the invitation is active. For example, a Firm order that has an outstanding invitation to a Conditional cannot automatch with another contra Firm order that is placed in the BIDS ATS while the invitation is pending. Any Firm orders or Conditionals not subject to an outstanding invitation continue to be available for the matching and trading process.

Invitations and trades can also occur between two resting Firm orders or Conditionals. For example, a Firm order to buy and a Firm order to sell can be resting on the BIDS ATS order book with pricing terms that would match at a price outside of the current NBBO, but these two Firm orders are not permitted to match on the BIDS ATS because they are outside the NBBO. If the NBBO subsequently moves to a level that would permit the two Firm orders to match, then a trade can occur. In this case, there was no “aggressive” Firm order, and the BIDS ATS performs the same trading and invitation process as for Opening and Re-opening.

### Dual Conditional Treatment

As discussed in Part III, Item 9, the BIDS ATS supports “Dual Conditionals” in its matching process.

Where a Dual Conditional has aggressive status, it goes through the invitation cycle once using its AFU terms. If it is not involved in an invitation, the Dual Conditional will go through the cycles a second time, using its RFU terms.

If a Dual Conditional is passive, its priority relative to other passive Firm orders and Conditionals is dictated by its AFU terms. Once it is selected to interact with the aggressive Firm order or Conditional but fails to create an invitation, it is re-prioritized against the remaining passive Firm orders and Conditionals using its RFU terms and has the chance to interact with the same aggressive Firm order or Conditional a second time.

### NBBO Validation

The BIDS ATS screens the NBBO immediately prior to allowing the trading and/or invitation cycles to proceed for the following:

1. Crossed market - if the NBBO is crossed, then the BIDS ATS does not permit executions or invitations in the symbol.
2. Locked market - if the NBBO is locked, then the BIDS ATS will not (i) execute a trade if a Trader on either side of the potential trade has disabled trading at locked markets or (ii) create invitations. Traders have the option of setting their trading preference to prohibit trading in locked markets.
3. Wide spread - if the spread of the SIP NBBO exceeds the pre-set maximum spread permitted by the BIDS ATS, no trading nor invitation will occur. BIDS establishes a maximum spread that applies to all securities eligible to trade on the BIDS ATS. BIDS may adjust the permitted maximum spread at any time at its discretion without notifying the Participants.

As described in Part III, Item 9, BIDS Trader provides messaging capabilities that allow for bi-lateral negotiation and executions resulting from AIOI messaging. Any resulting trades may execute at, within, or outside the NBBO as agreed to by both parties to the trade. Executions outside the NBBO would initiate an ISO. (See Part III, Items 9 and 23.)



## Tradeable Price

The BIDS ATS makes all pricing determinations with reference to the NBBO calculated in accordance with the description in Part III, Item 23 below. In a single transaction, using the NBBO at the time and the Firm order and Conditional requirements, Firm orders and Conditionals considered for automatching and/or invitation are affixed a “tradeable price” for the scope of that transaction. To establish the tradeable price, the BIDS ATS reviews the pricing terms (limit price, if present, Price Protection (i.e., peg type), and peg offset) of the Firm order or Conditional and determines the most aggressive price (i.e., the highest price for buy Firm orders and Conditionals and the lowest price for sell Firm orders and Conditionals) at which it would trade. The resulting price is the tradeable price in the BIDS ATS.

## Price Determination and Price Improvement

The BIDS ATS determines the trade price during the trading and invitation cycles as follows:

1. Calculate the two tradeable prices
2. Determine the candidate trade price (see below for “candidate trade price” discussion)
3. Validate the candidate trade price

The BIDS ATS establishes the candidate trade price by determining the price at which two Firm orders or Conditionals can interact at that time. The candidate trade price is the price equal or closest to the NBBO midpoint that does not exceed the tradeable prices of the Firm orders ~~or~~, Conditionals, or AIOI involved. Once the candidate trade price is determined, the BIDS ATS then validates if this candidate trade price can be used at that time. To validate the candidate trade price, the BIDS ATS reviews for any restrictions, including regulatory restrictions, that would prevent a trade at that candidate trade price at that time.

Pursuant to the validation process, the candidate trade price is unusable (and thus no trading/invitation will occur) if:

1. it is outside the current limit-up/limit-down (LULD) restriction – not applicable to AIOIs.
2. the sell Firm order ~~or~~, Conditional, or AIOI is a non-exempted short, a regulatory short sale restriction is in effect, and the candidate trade price is equal to the national best bid (NBB).
3. it is outside the current SIP NBBO, which can happen if the candidate trade price is calculated using the synthetic NBBO rather than the SIP NBBO. This check is not performed for an AIOI that can execute outside the NBBO.
  - a. As discussed in Part III, Item 23 Market Data, the BIDS ATS uses a synthetic NBBO (so long as the data is available), but always validates the transaction price using the SIP NBBO.

## Effective Time for Prioritization

A Firm order or Conditional in the BIDS ATS is assigned an effective time by the BIDS ATS when it is accepted in the BIDS ATS. The BIDS ATS updates this effective time to the time of any cancel-and-replace action if the action involves a material change to the Firm order or Conditional. Material changes causing a new time stamp include changes to any price, volume, and short sale terms. Changes in short sale terms refers to short sale restrictions imposed by regulators pursuant to applicable rules and regulations.

All timestamps are assigned by the BIDS ATS matching engine, using the system time when the events take place.

### Delaying Cancellation of IOCs

As discussed in Part III, Item 7, Traders can designate a TIF on Firm orders ~~and~~, Conditionals, and AIOIs, and Firm orders and firm AIOIs can be designated as immediate or cancel (“IOC”). Automated Firm orders often are designated as IOC, which is effective for automatching but not meaningful in invitation interactions because an IOC Firm order needs to rest in the order book for at least a very brief time period (at least 1 millisecond) to allow any invited contra Conditional time to respond. Without this time period, an IOC Firm order would be limited to interacting only with Firm orders. To facilitate interactions with Conditionals, instead of requiring automated Traders to change their implementations and give up using IOCs on Firm orders, an automated Trader may opt in and allow the BIDS ATS to delay canceling its ~~IOCs~~ IOC Firm orders for a duration specified by the Trader. BIDS does not restrict the duration of any delay specified by a Trader; however, the duration is typically tens to hundreds of milliseconds. By opting in for this delay, the IOC Firm order has the rest-on-book time for an invited contra-party to firm-up. The automated Trader may choose to apply such a delay only to firm-up IOCs in response to invitations, or to all its ~~IOCs~~ IOC Firm orders. BIDS Trader has no function allowing submission of IOCs or delayed IOCs. The option to delay cancellation is not available for firm AIOIs designated with an IOC TIF.

### Intra-firm Priority

The BIDS ATS allows Subscribers to give priority to contra-parties from that Subscriber, subject to the BIDS ATS restrictions preventing wash trades. If enabled and the aggressive Firm order or Conditional is from such a Participant, then the passive Firm orders and Conditionals will be sorted in a way preferencing those from the same source: first by tradeable price, then those from the identified source over others, then by volume, then by effective time (i.e., price/source/volume/time priority). Intra-firm Priority can be set up for Firm orders or Conditionals sent to the general BIDS ATS, or for orders sent to a Hosted Pool.

### Hosted Pools

Hosted Pools, discussed in Part III, Item 14, can be set up as a business arrangement with certain Subscribers and are only available to the Subscribers that set them up. Firm orders and Conditionals from this group of one or more Subscribers can be designated to belong to the Hosted Pool and only interact with Firm orders and Conditionals in the same pool. The matching and trading rules and logic in a Hosted Pool are the same as in the BIDS ATS.

## Subscriber Risk Management and Controls

All Subscribers to the BIDS ATS are registered broker-dealers and are subject to the SEC's Market Access Rule (Rule 15c3-5 under the Securities Exchange Act of 1934). The BIDS ATS provides Sponsors with tools and functionality that they may use to assist them in complying with these obligations. This includes providing administrative access to Sponsors to allow them to set and manage risk limits for their Sponsored Firms, as well as the ability to suspend sponsorship for specific or all customers or restrict certain types of trades (e.g., short sales). The BIDS ATS will not allow a trade by a Sponsored Firm if it would breach the limit imposed by the Sponsor. Upon request of a Sponsor, the BIDS ATS can configure email alerts to the Sponsor to be sent when risk limits or some high watermarks are exceeded by a Sponsored Firm. If a Firm order or Conditional from a BIDS Trader User exceeds the Sponsor's risk limit, the BIDS Trader server facility will reduce the size of the Firm order or Conditional to within the permitted limit (so long as the amount is above any minimum volume requirements from the Trader).

## Treatment of Partially Traded Orders

Pursuant to voluntary preference settings, a Trader may direct the BIDS ATS on how to handle any remaining volume that is below its minimum volume requirement but not down to an odd-lot. The remaining volume may be cancelled back, or left in the BIDS ATS as an All-or-None order.

Where the remaining volume is an odd-lot:

1. For BIDS Trader Users, BIDS fills the remaining odd-lot volume automatically at the execution price by the BIDS Trader User.
2. For Sponsored Firms not using BIDS Trader, they can choose between having BIDS fill the odd-lot automatically as for Sponsored Firms using BIDS Trader, or have the BIDS ATS cancel back the odd-lot.
3. For Subscribers, their odd-lots are always cancelled back.

BIDS Trader Users also have the option of using "clean up" to work remaining volumes, which involves directing BIDS to route the remaining volume to a specified third party trading venue with which the BIDS ATS has connected.

## Self-crossing Rules

The BIDS ATS prevents certain Firm orders or Conditionals from interacting with Firm orders and Conditionals submitted by the same Participant ("self-crossing"). For example, a Sponsored Firm is prevented from matching with itself as a counterparty. In addition, a Subscriber cannot interact with itself if either of the opposing Firm orders or Conditionals are entered with a principal capacity.

At the request of a Participant, the BIDS ATS can also prevent a Participant from "self-crossing" with an affiliated Participant, by setting up an explicit block for the pair. The block may apply to all Firm orders and Conditionals of the affiliated Participant, or limited to a specific capacity (i.e., principal or agency).

### Execution Errors

BIDS may, at the request of a Participant or on its own initiative, determine to review any transaction on the BIDS ATS to assess whether it was “clearly erroneous” (i.e., there is an obvious error in any term, such as price, quantity, or identification of the security or a technical issue is identified). If BIDS determines a transaction was clearly erroneous, it may cancel (bust) the cross trade or cancel one side of the cross trade and take over the one side of the trade and cover that position as soon as is practicable. BIDS will cover the position by submitting via FIX Protocol an offsetting order to BOFA, BIDS’ clearing agent. Therefore, the trades to cover the position will both be executed and cleared by BOFA.

### Allocations

The BIDS ATS does not perform any trade allocations.

- d. Are the established, non-discretionary rules and procedures required to be identified in Item 11(c) the same for all Subscribers and the Broker-Dealer Operator?**

**Yes X No ☐**

**If no, identify and explain any differences.**

\* \* \* \* \*

**Item 14: Counter-Party Selection**

- a. **Can orders or trading interest be designated to interact or not interact with certain orders or trading interest in the NMS Stock ATS (e.g., designated to execute against a specific Subscriber's orders or trading interest or prevent a Subscriber's order from executing against itself)?**

Yes ☒ No ☐

**If yes, explain the counter-party selection procedures, including how counter-parties can be selected, and whether the designations affect the interaction and priority of trading interest in the ATS.**

Participants and Traders in the BIDS ATS have certain tools that provide the ability to manage the counter-parties with which they interact on the BIDS ATS. To the extent these tools are used, trading interest will only interact with counter-parties that meet the specified criteria.

- a. BIDS Filters

As discussed in Part III, Items 7 and 9, the BIDS ATS permits a Trader to restrict its Firm orders or Conditionals from sending invitations to counter-parties based on the counter-party's BIDS Scorecard level as determined by BIDS.

- b. Capacity

Sponsored Firms may choose not to interact with principal capacity Firm orders or Conditionals either in general, or on an order-by-order basis.

Sponsored Firms may choose not to interact with principal capacity Firm orders or Conditionals under a minimum volume in general, or on an order-by-order basis.

- c. Invite mode

As discussed in Part III, Item 9, the BIDS ATS permits Traders to use Invite Mode to limit its interaction with certain types of contra-party Conditionals. (Invite mode options: on, off, auto-only)

- d. Same Counterparty

The BIDS ATS restricts Participants from interacting with themselves in the following situations:

- a. A principal capacity Firm order or Conditional from a Subscriber will not interact with a principal Firm order or Conditional from that Subscriber.
  - b. A Firm order or Conditional from a Sponsored Firm will not interact with Firm orders or Conditionals from the same Sponsored Firm.
- e. Hosted Pool

At the request of one or more Subscribers, BIDS will establish a "Hosted Pool" that is

totally segregated from the other Firm orders and Conditionals in the BIDS ATS and in other Hosted Pools. Firm orders and Conditionals from Participants in a Hosted Pool can be designated to belong to the Hosted Pool and only interact with Firm orders and Conditionals in the same Hosted Pool. The matching and trading rules and logic in a Hosted Pool are the same as in the BIDS ATS.

Within the Hosted Pool, Participants and Traders can denote Firm orders and Conditionals to belong to a sub-grouping within the Hosted Pool and the Firm order or Conditional can be set not to trade against other Firm orders or Conditionals within the same sub-group.

BIDS does not put limitations on which Subscribers may set up a Hosted Pool.

**f. AIOIs**

As discussed in Part III, Item 9, Sponsors may send AIOIs to their Sponsored Firms who use BIDS Trader. An AIOI will interact only with those Sponsored Firms of that Sponsor who use BIDS Trader and have elected to receive AIOIs from that Sponsor. Sponsors can create lists of counterparties and if those counterparties agree to receive AIOIs from that Sponsor, the relationship is created which allows for AIOI messages to be transmitted and replied to. The Sponsor can determine which counterparties on its list will receive AIOIs on a symbol by symbol basis and may offer different terms to different Sponsored Firms, even within the same symbol. The Sponsor may also set prioritization for the order in which their AIOIs are distributed.

- b. If yes to Item 14(a), are the procedures for counter-party selection required to be identified in Item 14(a) the same for all Subscribers and the Broker-Dealer Operator?

Yes ☒ No ☐

If no, identify and explain any differences.

**Item 15:      Display**

- a. Does the NMS Stock ATS operate as an Electronic Communication Network as defined in Rule 600(a)(23) of Regulation NMS?

Yes ☐ No ☒

- b. Are Subscriber orders and trading interest bound for or resting in the NMS Stock ATS displayed or made known to any Person (not including those employees of the NMS Stock ATS who are operating the system)?

Yes ☒ No ☐

**If yes, explain the display procedures, including how and when Subscriber orders and trading interest are displayed, how long orders and trading interest are displayed, what information about orders and trading interest is displayed, and the functionality of the Broker-Dealer Operator and types of market participants that receive the displayed information.**

As described in Part III, Item 9, in the context of Conditionals, the existence of counterparty trading interest may be made known through the invitation process described in that Item. The invitation process, however, makes counterparty trading interest known solely on a share-to-share basis. That is, a Firm order or Conditional cannot invite multiple Conditionals unless its quantity is large enough to satisfy all the invited Conditionals. As also described in Part III, Item 9, Sponsors sending an AIOI are identified on the AIOI notification, and an AIOI itself includes at least symbol, side, price terms, quantity, and capacity.

- c. If yes to Item 15(b), are the display procedures required to be identified in 15(b) the same for all Subscribers and the Broker-Dealer Operator?

Yes ☒ No ☐

**If no, identify and explain any differences.**

\* \* \* \* \*



**Item 19:      Fees**

- a.    Identify and describe any fees or charges for use of the NMS Stock ATS services, including the type of fees (e.g., subscription, connectivity), the structure of the fees (e.g., fixed, volume-based, transaction-based), variables that impact the fees (e.g., types of securities traded, block orders, form of connectivity to the ATS), differentiation among types of Subscribers (e.g., broker-dealers, institutional investors, retail) and range of fees (e.g., high and low).**

BIDS offers Subscribers a structured transaction-based fee model that sets forth the fee for each share executed on the BIDS ATS. BIDS charges fees to Subscribers only (including when acting as a Sponsor); fees are not directly billed to Sponsored Firms.

The specific fees for a particular Subscriber are determined based on disclosed, objective criteria: (i) means of access; (ii) the type of order; and (iii) the total volume of executions during the calendar month. Within this fee structure, BIDS distinguishes fees between direct access by a Subscriber and sponsored access provided by a Subscriber on behalf of a customer (Sponsored Firm).

BIDS applies its access fee model to all Subscribers and charges the same rate to all similarly situated Subscribers. As a result, any Subscriber that meets the criteria for a specified fee rate will be charged the same fee as another Subscriber that also meets the same criteria. BIDS makes its rates and corresponding qualifications for the rates available to all Subscribers. Any changes to these rates are provided to Subscribers in advance of the effective date of the change. BIDS' application of its fee rates is governed by its Subscriber Agreement, the terms of which are materially the same for every Subscriber.

The fees for the BIDS ATS range from \$0.0003 to \$0.005 per share executed on the BIDS ATS or filled from odd-lots or routed Firm orders. BIDS does not charge a fee on self-crossed trades that are not preferenced. BIDS does not offer rebates or other forms of credit against the applicable fees. Executions resulting from AIOIs are charged to the Sponsor at regular Subscriber rates unless the AIOI message has a "principal" capacity, in which case the Sponsor leg of the execution is not charged a fee.

BIDS passes through clearing fees for Subscribers' preferenced self-crossed trades, certain regulatory fees (including FINRA's Section 3 fee and Trading Activity Fee ("TAF") for Subscribers who are not FINRA members), and connectivity fees, including applicable tax billed to BIDS for Subscribers connecting through third party providers.

- b.    Identify and describe any fees or charges for use of the NMS Stock ATS services that are bundled with the Subscriber's use of non-ATS services or products offered by the Broker-Dealer Operator or its Affiliates, including a summary of the bundled services and products, the structure of the fee, variables that impact the fee, differentiation among types of Subscribers, and range of fees.**

Not applicable.

- c.    Identify and describe any rebate or discount of fees or charges required to be**

**identified in Items 19(a) and 19(b), including the type of rebate or discount, structure of the rebate or discount, variables that impact the rebate or discount, differentiation among types of Subscribers, and range of rebate or discount.**

BIDS does not offer fee rebates. In addition, BIDS adheres to its fee structure by charging each similarly situated Subscriber the same fees and does not offer discounts to these fees.

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## **Item 22: Clearance and Settlement**

- a. Describe any procedures and material arrangements undertaken to facilitate the clearance and settlement of transactions on the NMS Stock ATS (e.g., whether the ATS becomes a counterparty, whether it submits trades to a registered clearing agency, or whether it requires Subscribers to have arrangements with a clearing firm).**

BIDS has entered into a clearing agreement with BOFA to provide for BIDS' clearance and settlement of transactions executed on the BIDS ATS. BOFA is a wholly owned subsidiary of Bank of America Corporation. BIDS requires all Subscribers either to be members of NSCC or to enter into a clearing arrangement with an NSCC member.

All BIDS ATS trades with Subscribers that clear through BOFA (DTC No. 161) are cleared and settled by BOFA. All BIDS ATS trades with Subscribers that do not clear through BOFA (DTC No. 161) are submitted by BOFA on behalf of both BIDS and its Subscribers to NSCC via an NSCC Qualified Service Representative Agreement ("QSR") or in limited circumstances via a Nasdaq Act Give Up Agreement ("AGU") with BIDS as the executing broker and the Subscriber as the introducing broker. All routed trades, odd lot trades, and error trades executed by BOFA are also cleared and settled by BOFA. All trades for execution and/or clearing and settlement are submitted to BOFA via FIX Protocol.

### **Standard Cross Trades**

BIDS sends BOFA two trades for clearance and settlement for each cross trade executed on the BIDS ATS. Settlement occurs with BIDS as the executing broker and the Subscriber as the introducing broker, resulting in BIDS as the counter-party to all transactions for clearance and settlement purposes.

### **Error Positions**

As described in Part III, Item 11(c) (Execution Errors), when BIDS determines it is required to take over one side of a cross trade as the result of an error, BIDS cancels the applicable leg of the BIDS ATS cross trade in the BIDS ATS. The lack of an offsetting trade because of the cancellation creates a position in the agency pass through account maintained with BIDS' clearing agent (BOFA). BIDS then journals the position from its agency pass through account to its error account that is also maintained with BOFA. BIDS creates the offsetting trade to flatten out the error account position that was created by the cancelation of the single leg by sending limit orders routed via FIX to BOFA. BOFA provides the fills back to BIDS and BIDS books the offsetting trades to the error account to flatten the position.

### **Odd-lots**

The BIDS ATS fills odd lots with a single Sponsor only and therefore BIDS incurs an odd-lot

position in its odd-lot account with BOFA when the odd lot is filled. To flatten out the odd-lot position, BIDS automatically sends a market order to BOFA via FIX to execute an offsetting trade.

## **Routed Trades**

As described in Part III, Item 16(b), BIDS Trader Users may direct a Firm order to be routed by the BIDS ATS to BOFA for execution. The BIDS ATS will then route the Firm order to BOFA under BIDS' MPID. If the routed trade is executed, BOFA provides a fill back to the BIDS ATS. The BIDS ATS then provides that fill to the Sponsor of the initial routed Firm order and sends that fill to BOFA for clearance and settlement.

## **ISOs**

As described in Part III, Item 9, the BIDS ATS may route an ISO order type to BOFA to provide the necessary executions to meet the ISO exception in Regulation NMS for executions outside the NBBO resulting from AIOI messaging. The BIDS ATS will route the Firm order to BOFA under BIDS' MPID. If the routed order is executed, BOFA provides a fill back to the BIDS ATS. The BIDS ATS then provides that fill to the Sponsor of the initial routed Firm order and sends that fill to BOFA for clearance and settlement.

- b. Are the procedures and material arrangements undertaken to facilitate the clearance and settlement of transactions on the NMS Stock ATS the same for all Subscribers and the Broker-Dealer Operator?**

Yes ☒ No ☐

**If no, identify and explain any differences.**

**Item 23: Market Data**

- a. **Identify the sources of market data used by the NMS Stock ATS (e.g., proprietary feed from a national securities exchange, feed from the securities information processor (“SIP”)), and how the ATS uses market data from these sources to provide the services that it offers, including how the ATS uses market data to determine the NBBO and protected quotes, and display, price, prioritize, execute, and remove orders and trading interest on the ATS.**

The BIDS ATS receives the national best bid and offer (“NBBO”) from the following sources:

1. Direct feeds through Redline Trading Solutions, Inc., a third-party vendor (“Vendor”), that:
  - a. uses proprietary feeds from all national securities exchanges other than NYSE’s National and Chicago exchanges—for which it uses the SIP feed—to produce the NBBO (“synthetic NBBO”)
  - b. will switch to extracting equivalent data from the SIP where a proprietary feed is: unavailable; unstable; experiencing unacceptable latencies; or detected to be providing quotes that appear to have quality issues. When a direct feed is affected, the SIP is used for market data from the affected market and Vendor will continue to use direct feeds from the unaffected markets to determine the NBBO.
2. SIP (Security Information Processor) (“SIP NBBO”)

The BIDS ATS uses the synthetic NBBO to calculate the prices used for executions and invitations (see Part III, Item 11). The BIDS ATS checks all trade prices using the synthetic NBBO against the SIP NBBO. If a trade price is outside the corresponding SIP NBBO, the trade will not be executed. unless the trade resulted from AIOI messaging. As described in Part III, Item 9, BIDS Trader provides messaging capabilities that allow for bi-lateral negotiation and executions resulting from AIOI messaging, and any resulting trades may execute at, within, or outside the NBBO as agreed to by both parties to the trade. Executions outside the NBBO would initiate an ISO. (See Part III, Items 9 and 23.)

The BIDS ATS system monitors and compares the synthetic NBBO and the SIP NBBO on a continuous basis and if (i) there is data loss or (ii) the two NBBOs are out of sync for a prolonged period, then the BIDS ATS may deem the NBBOs invalid for trading for as long as the problem persists.

During any period when the synthetic NBBO is not available for any reason, the BIDS ATS will use the SIP NBBO for trade and invitation price determination.

- b. **Are the sources of market data and how the NMS Stock ATS uses market data for the services that it offers the same for all Subscribers and the Broker-Dealer Operator?**

Yes ☒ No ☐

**If no, identify and explain any differences.**