

Exhibit 3

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

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.

The ATS offers a market data feed (the "IQX Data Feed") that disseminates all eligible orders that Subscribers submit to ASPEN (as discussed in Part III, Item 7). The IQX Data Feed only displays orders that Subscribers choose to display.

Orders eligible to be displayed are: (1) Limit Orders and (2) Primary Peg Orders. Limit Orders and Primary Peg Orders also may be designated as add liquidity only orders ("ALO Orders"). For more information on the ATS' order types and order type modifiers, please see Part III, Item 7. The ATS will display Limit Orders and Primary Peg Orders at one price variation less aggressive than the price of contra-side interest displayed inside of the ATS or as part of the National Best Bid or Offer ("NBBO") (whichever is lower) where such orders would otherwise lock or cross displayed contra-side interest inside the ATS or as part of the NBBO as determined by the SIP and/or SRO proprietary data feeds.

The ATS may setup a Hosted Pool, at the request of a Subscriber and subject to the approval of the ATS, where such Subscriber will designate that an order interact with other orders entered by that same Subscriber, or other Subscribers participating in the same Hosted Pool. Orders designated by a Subscriber to interact with other orders in a Hosted Pool, including orders designated to interact first with other orders in a Hosted Pool and then with orders outside the Hosted Pool, are not eligible to be displayed orders.

The ATS' Hosted Pools ~~permit the publication of~~ provides certain services relating to indications of interest ~~("IOIs")~~ ("IOIs"). A complete discussion of such services can be found in Part II, Item 9 and is described generally below.

First, the ATS' Hosted Pools permit the publication of IOIs which allow participants of a Hosted Pool to send IOIs to any other participant of that Hosted Pool. IOIs contain symbol, side and size- only.

Second, the ATS provides a separate service, a “Block IOI” service, only in the Hosted Pools to (1) have the ATS inform non-Subscriber clients (“Sponsored Firms”) of contra liquidity in a designated Hosted Pool by responding to IOIs sent by the Sponsored Firm to the ATS and (2) to allow such Sponsored Firms to send firm orders directly to the designated Hosted Pool via a sponsored access FIX session of a Subscriber sponsoring the Sponsored Firm (“Sponsor”). Similar to other IOIs in the ATS, Block IOIs contain symbol, side and size only. The ATS provides Sponsors with tools and functionality that they may use to assist them in complying with their obligations under the SEC’s Market Access Rule (Rule 15c3-5 under the Securities Exchange Act of 1934). This includes Sponsors setting and managing risk limits for their Sponsored Firms, as well as the ability to suspend sponsorship for specific or all clients or restrict certain types of trades. The ATS will not allow a trade by a Sponsored Firm if it would breach the limit imposed by the Sponsor.

Subscribers and non-Subscribers can receive the IQX Data Feed (“IQX Data Feed Recipients”). Non-Subscribers that receive the IQX Data Feed include buy-side firms, banks, and National Securities Exchanges. The IQX Data Feed is provided to IQX Data Feed Recipients through Pico. The ATS does not charge IQX Data Feed Recipients for the receipt of the IQX Data Feed. Pico, however, may charge a telecommunications/communications fee to receive the IQX Data Feed that IQX Data Feed Recipients are responsible for paying. Additional information regarding the IQX Data Feed can be found in response to Part III, Item 15.

IntelligentCross offers a SOR that allows clients to send orders FIX-tagged with instructions to access the SOR in routing orders to external trading centers, such as ATSs (including the IntelligentCross ATS), single dealer platforms, exchanges, and other brokers. The SOR will access the ATS through direct market access providers that are also Subscribers to the ATS.

- 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.

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.

Answer: IntelligentCross has implemented written safeguards and procedures designed to protect the Confidential Trading Information of its Subscribers.

Access to Confidential Trading Information

All Shared Employees and certain Imperative Execution employees are responsible for the operation of the ATS or for the ATS's compliance with Regulation ATS or other applicable rules. -In accordance with the provisions of Rule 301(b)(10), a Series 24 registered supervisor of IntelligentCross ensures that the ATS restricts access to Subscriber Confidential Trading Information, which includes Subscribers' and Sponsored Firm's real time and historical orders, conditional orders, indications of interest ("IOIs") and Block IOIs (together "trading interest") and executions related to the ATS ("Subscriber Confidential Trading Information"), to Shared Employees and certain Imperative Execution employees who are operating the ATS or responsible for its compliance with Regulation ATS or any other applicable rules. Subscriber Confidential Trading Information shall not include information displayed through the IQX Data Feed. Determinations regarding granting access to Subscriber Confidential Trading Information are made on a case-by-case basis. In making such determinations, the ATS considers the function of the Shared Employees, Imperative Execution employees and the Consultants and the type of Subscriber Confidential Trading Information being accessed. Individuals with access to Subscriber Confidential Trading Information are only authorized to use such information for its intended purpose and cannot disseminate or give such information to anyone not authorized to receive that information.

Those individuals responsible for the operation of the ATS have controlled access via unique login credentials to view a Subscriber's ~~order~~trading interest and ~~trades~~executions in the ATSATS' systems. -If ~~an order~~trading interest, as applicable, has been made available to IntelligentCross, it resides on the IntelligentCross server, but such data is only accessible by IntelligentCross operations personnel or Imperative

Execution personnel as supervised by IntelligentCross Registered Persons. IntelligentCross requires such personnel to understand the authorized uses of such information and requires such personnel to acknowledge, in the form of an attestation, this understanding. Personnel undergo annual compliance training that includes materials related to protecting Confidential Trading Information.

Requests for access to real-time Subscriber Confidential Trading Information must be approved by the CEO/COO of the ATS or their designee. The requests must be for individuals involved in the operation or compliance functions of the ATS.

IntelligentCross conducts as needed reviews of the individuals that have access to Subscriber Confidential Trading Information to ensure its continued compliance with Rule 301(b)(10). As part of the review, IntelligentCross confirms that individuals with access to Subscriber Confidential Trading Information continue to have a valid need to access such information.

IntelligentCross and Imperative Execution maintain information barriers to separate employees, consultants, and systems with access to Subscriber Confidential Trading Information of the ATS from those not permitted to access such information. These information barriers serve as controls to protect Subscriber Confidential Trading Information. Shared Employees and consultants receive periodic training and periodic guidance regarding the proper use of Subscriber Confidential Trading Information and that Subscriber Confidential Trading Information may only be used with respect to the support and operation of the ATS.

IntelligentCross protects against unauthorized access to or use of Subscriber Confidential Trading Information by use of a password system. Login credentials and passwords are required to gain access to systems containing Subscriber Confidential Trading Information. Passwords are required to be changed periodically and are disabled for terminated individuals or those no longer requiring access. The ATS does not maintain physical separation barriers.

With respect to the ATS's service provider Pico, Pico employs a dedicated, segregated management environment to provide secure access for management of customer and customer facing systems. The environment is protected via a defense in-depth strategy, utilizing a combination of firewalls, network access controls, intrusion detection systems and 2-factor authentication. Customer systems and networks utilize access control lists enforcing the appropriate segmentation and prevention of unauthorized access or data exfiltration. Controls and their effectiveness are actively monitored by a dedicated information security group utilizing a Security Information Event Management system (SIEM), ensuring deviations or anomalies are detected, alerted and reported in a timely manner.

With respect to Instinet, the ATS's clearing provider, it is a broker dealer that is subject to the various rules and requirements that broker-dealers adhere to as part of their day-to-day operations. IntelligentCross has an agreement with Instinet that

contains standard confidentiality provisions that further protect Subscriber Confidential Trading Information from potential misuse.

IntelligentCross is required to report transactions executed in the IntelligentCross ATS to the consolidated tape via a FINRA Trade Reporting Facility (TRF).

IntelligentCross offers a SOR that allows clients to send orders FIX-tagged with instructions to access the SOR in routing orders to external trading centers, such as ATSs (including the IntelligentCross ATS), single dealer platforms, exchanges, and other brokers. The SOR will access the ATS through direct market access providers that are also Subscribers to the ATS. The SOR does not utilize conditional orders, IOIs or Block IOIs.

Three types of order and trading information are used in connection with the SOR:

- 1) In order to route orders, the SOR has access to and uses the order detail found in the FIX message sent to IntelligentCross. For example, the SOR uses the price or effective price on an order to determine the order's marketability. The SOR can then use the order's marketability to determine the routing logic for that order.
- 2) Execution data specific to the order being executed can be used by the SOR when an order remains live and partially executed. For example, the SOR can reroute unexecuted shares resting at one venue to another venue based on partial execution data specific to that order. This includes execution data from both IntelligentCross ATS and external trading centers.
- 3) As part of its smart order routing functionality, the SOR is equipped with a machine learning-based process to optimize order routing decisions based on aggregated information about historical routing and execution results involving orders with similar characteristics that have been previously routed. The SOR has the same access to information regarding live orders on the IntelligentCross ATS as is available to all Subscribers, such as that via the IQX market data feed.

Employees are not authorized to use Confidential Trading Information for purposes of operating the SOR.

Before utilizing a DMA provider and on an annual basis thereafter, IntelligentCross requests and reviews the policies and procedures that the DMA provider has in place to ensure the protection of Confidential Trading Information. The DMA providers have written policies and procedures reasonably designed to safeguard Confidential Trading Information. The DMA providers' employees' access to Confidential Trading Information is dependent upon the level of information that is needed to perform their duties and responsibilities related to providing direct market access ("need to know standard"). The DMA providers' employees are strictly prohibited from using such information in an unauthorized manner and from discussing the details of any Confidential Trading Information with persons who do not need such information to

carry out their designated duties and responsibilities. Access to such information is granted as needed to perform these duties and responsibilities. Access to Confidential Trading Information is controlled through permission configurations that provide application access only to entitled users (i.e., users who require access to information to carry out designated duties and responsibilities). Access entitlements are approved by designated supervisors and documented, tracked and monitored. Such procedures include reviews of organizational structure including any new or transferred employees as well as reviews of any personal account trades and any related firm/divisional policy violations. On an annual basis, the DMA Providers' employees (including those with duties and responsibilities related to providing DMA access) participate in compliance training that addresses information protection and client confidentiality. Additionally, the DMA Providers monitor electronic communications to identify potential policy violations.

The ATS' written safeguards and procedures discussed above relating to access to confidential trading information also applies to information relating to conditional orders, IOIs, and the ATS' Block IOI service.

The Block IOI service, described in Part III, Item 9, is available in the ATS' Hosted Pools. Given the sponsored access model made available by the ATS in the Block IOI service, the ATS provides each Sponsor with information related to any firm order, conditional, or trade on which that Sponsor has been designated by a Sponsored Firm.

Personal Securities Transactions

IntelligentCross policies and procedures require pre-approval of personal securities transactions by Registered Persons of the ATS and require a 30-day holding period.

The policies and procedures cover all securities transactions in outside brokerage accounts directed by employees, including but not limited to transactions in securities issued by a company (e.g. stocks, bonds), transactions in any reference securities (e.g. options, preferred stock, futures), and transactions in any packaged products including but not limited to mutual funds and exchange traded funds.

Registered Persons are not permitted to day trade in any securities. They must submit a request in writing or via email to the CCO and CEO prior to each personal securities transaction and must obtain approval from either the CCO or CEO prior to effecting a personal securities transaction. Associated Persons must submit a form or standard email request to the CCO and CEO that identifies:

Security Name & Symbol

Purchase or Sale

Quantity

For Sales: Compliance with 30 Day Holding Period

Compliance personnel conduct periodic reviews of individuals brokerage accounts to ensure compliance with IntelligentCross policies and procedures regarding personal securities transactions.

- 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 Shared Employees, certain Imperative Execution employees, the CCO, and the FINOP, and employees at Pico and Instinet have access to Subscriber Confidential Trading Information. Generally, Shared Employees and Imperative Execution employees have access to both real-time and historical ~~order~~trading interest and trade information; however, certain individuals may be provided access to only historical ~~order~~trading interest and trade information given their job function. Shared Employees and Imperative Execution employees have access to Subscriber Confidential Trading Information to ensure proper operations and maintenance of the ATS. As a network provider, Pico will have access to Confidential Trading Information because they monitor IntelligentCross' network and host IntelligentCross' equipment. As IntelligentCross' clearing service provider, Instinet will have access to Subscriber execution information but not ~~order~~trading interest information. Instinet and Goldman Sachs will have access to Confidential Trading Information because they act as DMA providers for the SOR, as described in Item 7(a).

Part III: Manner of Operations

Item 2: Eligibility for ATS Services

- a. Does the NMS Stock ATS require Subscribers to be registered broker-dealers?

☒ Yes ☐ No

- b. Are there any other conditions that the NMS Stock ATS requires a Person to satisfy before accessing the ATS services?

☒ Yes ☐ No

If yes, list and provide a summary of the conditions.

Answer: The ATS allows as Subscribers those applicants who satisfy certain eligibility requirements. Specifically, Subscribers must meet the following requirements:

1. A broker-dealer registered with the SEC and a member of at least one SRO.
2. Pass Office of Foreign Asset Control ("OFAC") checks and pass disciplinary/regulatory reviews. The disciplinary/regulatory review will include reviewing public information to determine if the potential Subscriber has a disciplinary history that would preclude trading on the ATS.
3. Satisfy such technical or systems requirements as may be prescribed by IntelligentCross, including but not limited to: connectivity certification, the ability to send orders and cancellations, and to receive trades, cancellations, rejects and trade breaks from the ATS.
4. Have clearing and settlement systems and/or arrangements in place to support participation on the ATS, as described further in Part III, Item 22.
5. Attest to having in place arrangements to ensure all staff and systems involved in the conduct of business with IntelligentCross are suitable, adequately registered, as applicable, properly trained and supervised.
6. Execute the Subscriber Agreement.
7. Execute all other applicable agreements required to facilitate clearance, settlement, trade reporting, error correction and cancellation of trades effected on or through the ATS.

IntelligentCross shall, after receiving a completed Subscriber application and any additional documentation requested, in its discretion, approve or reject such application, or approve such application subject to such conditions and/or restrictions as it considers appropriate (e.g., potentially limiting the number of orders a Subscriber may send). It processes all applications and completes its review and approval/denial process within thirty calendar days of reception of each completed Subscriber application. Each approval or denial must be authorized by the Chief Compliance Officer and communicated to the Head of Trading Operations. Trading Operations shall then promptly notify the applicant of the decision.

IntelligentCross creates and maintains records of all such decisions granting access, denying access, and granting limited or restricted access, for each applicant, and the reasons for so doing.

In addition, in connection only with the ATS' Block IOI service in Hosted Pools (as discussed in Part II, Items 9 and 14), through "sponsored access arrangements," Subscribers may authorize their clients ("Sponsored Firms") to submit firm orders directly to the Hosted Pools through a FIX connection. For eligibility purposes, a Sponsored Firm must be approved by at least one Sponsor before it is permitted to submit firm orders directly into the ATS. Sponsored Firms may be authorized by multiple Sponsors and, as a result, Sponsored Firms are required to designate a Sponsor for each firm order submitted. Sponsored Firms are clients of the Sponsor and not the ATS, and Sponsored Firms are not Subscribers of the ATS. The Sponsor is responsible for all firm orders on which it is designated as Sponsor entered into the ATS by its Sponsored Firms (e.g., risk checks, clearance and settlement). The ATS does not approve, restrict or categorize the type of entity that a Sponsor may authorize as a Sponsored Firm.

- c. If yes to Item 2(b), are the conditions required to be identified in Item 2(b) the same for all Persons?

☒ Yes ☐ No

If no, identify and describe any differences.

- d. Does the NMS Stock ATS require Subscribers to enter a written agreement to use the ATS services?

☒ Yes ☐ No

Item 3: Exclusion from ATS Services

- a. Can the NMS Stock ATS exclude, in whole or in part, any Subscriber from the ATS services?

☒ Yes ☐ No

If yes, list and provide a summary of the conditions for excluding, in whole or in part, a Subscriber from the ATS services.

Answer: A Subscriber can be excluded from the ATS if the Subscriber no longer satisfies the eligibility requirements for acceptance as a Subscriber.

The operation of the ATS also is continuously monitored by the ATS's trading operations team ("Trading Operations") to ensure the smooth and correct functioning of the system as well as adherence to the ATS's operating procedures and the applicable securities rules and regulations. Authorized personnel can monitor order entry port status, order acknowledgement latency, market data

quality, and potential trade-throughs, in addition to detailed metrics on order entry rates, open and executed exposures, and executed volumes. Authorized personnel monitor to determine whether Subscribers or Sponsored Firms are sending orders in excess of 5,000 orders per second or a single order with notional value greater than \$100,000,000. Any orders in excess of these risk limits will be rejected by the ATS, and authorized personnel will have discussions with Subscribers or Sponsored Firms who exceed these risk limits about their order entry behavior.

In addition to real-time monitoring, any anomalies in the activities in the ATS will be reviewed using end-of-day reports. These reports include T+1 clearing breaks, same entity crosses and execution quality reports. In the event of a problem, such as a systems error at a Subscriber or market data issues, Trading Operations may, among other actions, halt the activity of a Subscriber or set of Subscribers and/or stock or set of stocks in order to contain the impact of a problem while pursuing a resolution.

Regarding the Block IOI service in the ATS' Hosted Pools, the ATS maintains its own risk limits and restrictions, as discussed above, that may prevent a Sponsored Firm from entering a firm order, in whole or in part, if such thresholds are exceeded. In addition, relating to the Block IOI service, the ATS allows Sponsors to set and manage their risk limits for their Sponsored Firms, as well as the ability to suspend sponsorship for specific or all clients or restrict certain types of trades. These specific risk limits are completely up to the Sponsor to set (although such risk limits cannot supersede the ATS' own risk limits) and are conveyed to the ATS relating to each Sponsored Firm. The ATS will implement the risk limits imposed on a Sponsored Firm by a Sponsor, and the ATS will not allow a trade by a Sponsored Firm if it would breach the limit imposed by the Sponsor. The ATS also has the right to exclude a Sponsored Firm if necessary (e.g., if engaged in activities that the ATS determines to be detrimental to the ATS or any of its Subscribers). If the ATS excludes a Sponsor for any reason as discussed in this Item 3, any Sponsored Firms would be unable to designate that Sponsor for any firm orders it wishes to submit to the ATS.

- b. If yes to Item 3(a), are the conditions required to be identified in Item 3(a) the same for all Subscribers?

☒ Yes ☐ 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 ☐ No

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

Answer:

General Operation of the ATS

Subscribers access the ATS via a Financial Information Exchange ("FIX") connection. Such access is available to Subscribers through an internet protocol address via communications that are compliant with the FIX API provided by the ATS. The ATS currently supports FIX 4.2.

The ATS does not accept orders via any other forms of communication (e.g., telephone, email, instant message).

Required Fields

Subscribers must communicate the following information to the ATS upon order entry through FIX:

Message Type

Client Order ID (unique identifier for order per session)

Execution Instructions

Subscriber Order Capacity (Agent, Principal, Riskless)

Symbol

Side (Buy, Sell, Sell Short, Sell Short Exempt)

Display

Price Instructions

Time in Force

Time of Order Creation (expressed in UTC)

Order Type

Order Quantity

ClientID (used for identifying the client (MPID))

Handling Instruction (ATS supports automated execution and does not provide broker intervention)

Hosted Pool Tag (if applicable)

Order Parameters

Minimum Quantity - Subscribers may submit orders with a MinQty for execution. Subscribers may set MinQty to permit the aggregation of contra-side interest to meet the minimum quantity requirements.

Maximum Quantity – Subscribers may submit orders with a MaxQty for execution. MaxQty is for Midpoint Peg Orders only.

The ATS's FIX Specification is available to Subscribers upon request.

- 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 ☐ 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 ☐ 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.

IntelligentCross offers a SOR to only persons that subscribe to the ATS that allows clients of IntelligentCross to send orders FIX-tagged with instructions to access the SOR in routing orders to external trading centers, such as ATSs (including the IntelligentCross ATS), single dealer platforms, exchanges, and other brokers. Access to the SOR is via a FIX connection separate from the FIX connection to the ATS. The SOR will access the ATS through direct market access providers that are also Subscribers to the ATS. The direct market access providers enter orders pursuant to Part III, Item 5.a. Orders that the SOR sends to the ATS via the direct market access provider to be routed to the ATS are directed orders and cannot be routed to any other venue.

The ATS also offers a Block IOI service to Sponsored Firms in Hosted Pools, which is described more fully in Part III, Item 9. Under the Block IOI service, Sponsored Firms send firm orders directly to a designated Hosted Pool via a sponsored access FIX session of a Sponsor. The FIX session is unique to the

Sponsored Firm. The Block IOI service will connect and integrate with a Sponsored Firm's OMS/EMS. The ATS does not restrict the use of the Block IOI service other than requiring that a Sponsored Firm using the service must have been approved by a Sponsor, and the Sponsor must set risk limits for the Sponsored Firm.

- 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.

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.

Answer:

Order Types and Order Type Modifiers

The ATS operates two different matching models: (1) a Midpoint book ("Midpoint") that only accepts non-displayed midpoint orders and (2) ASPEN (or the "Adverse Selection Protection Engine"), a full limit order book with optional displayed capability. The ATS uses a matching mechanism which is near-continuous and that matches orders at scheduled times ("Match Events"), as discussed further in Part III, Item 11.

As discussed further below, Midpoint only accepts Midpoint Peg Orders (which are not accepted in ASPEN). Any orders entered into IntelligentCross through any other order type (*e.g.*, Market Order, Limit Order, Primary Peg Order (with or without a limit price), and Marketable Peg Order (with or without a limit price)) will default to the ASPEN Fee/Fee book. Only Limit Orders and Primary Peg Orders (with or without a limit price) are eligible to be displayed on the ASPEN Fee/Fee book.

For Midpoint, only orders that have rested on the order book for a minimum period of time are eligible to match. Such "Minimum Resting Periods" are determined by the ATS and set in a stock-specific fashion, similar to Match Events. However, in no event will the minimum resting period exceed 200 milliseconds. There are no Minimum Resting Periods for orders on ASPEN.

Midpoint Peg Orders

Midpoint Peg Orders are orders to buy or sell a stated amount of a security that are to be executed only at the midpoint price of the NBBO in the Midpoint book. The ATS will accept Midpoint Peg Orders with or without a limit price. Midpoint Peg Orders will be non-displayed.

Midpoint Peg Orders with Time-in-Force Instructions

The ATS will accept Midpoint Peg Orders with time-in-force instructions. Midpoint Peg Orders may be so designated, and such orders are orders to buy or sell a stated amount of a security that are to be executed only at the midpoint price of the NBBO in the Midpoint book. The ATS will accept such Peg Orders with or without a limit price, and these orders

will be non-displayed. Midpoint Peg Orders with Time-in-Force instructions will be automatically canceled by the ATS within 100 milliseconds of order receipt by the matching engine; 100 milliseconds is the maximum timeframe in which a cancellation will occur. The amount of time until the order will be automatically canceled is calculated from the time of order receipt, and is determined by the ATS and calibrated on a security-by-security basis. The time period until automatic cancellation will be longer than or equal to the "Minimum Resting Period" (as discussed further in Part III, Item 11). The time period until automatic cancellation may be less than the time between Match Events such that the order may be canceled without participating in a Match Event. For example, if, for a particular security, the time period until automatic cancellation is 20 milliseconds but the time between Match Events is 30 milliseconds, it is possible that an order would be entered by a Subscriber and be automatically canceled before the first Match Event subsequent to order entry. The factors that contribute to determining the amount of time until an order is canceled include time of day, price reaction after trades, volume and volatility in the security, average spread, trade size, and other market factors. The time until cancellation is adjusted after enough data points have been accumulated to warrant an adjustment. A Subscriber may cancel such a Midpoint Peg Order at any time before the order is fully executed or the ATS cancels the order.

Below is an example of the operation of a Midpoint Peg Order with Time-in-Force instructions:

Security XYZ has a Match Event Interval to occur between 7 to 12 milliseconds apart.

The next Match Event is scheduled at 10:01:04:010.

At 10:01:04:000, Subscriber A submits a 1000 share Midpoint Peg buy order with a limit price of \$25.06 to participate in the Midpoint book for Security XYZ. Assume that the time period until the Midpoint Peg Order is automatically canceled for Security XYZ is 30 milliseconds.

At 10:01:04:005, Subscriber B submits a 500 share sell order with no limit price and a TIF of Day to participate in the Midpoint book for Security XYZ.

At the next scheduled Match Event for Security XYZ, (10:01:04:010), the matching engine retrieves the NBBO and determines that the NBBO is \$25.05 by \$25.07. The Midpoint price at the time of the Match Event is \$25.06 and is the Matching Price. Assuming that Subscriber A's and Subscriber B's orders have met the minimum resting period, Subscriber A will match 500 shares with Subscriber B at \$25.06 during the Match Event at 10:01:04:010. Subscriber A's remaining order for 500 shares is eligible to participate in any subsequent Midpoint Match Event occurring prior to the automatic cancellation of the order by the ATS at 10:01:04:030.

Primary Peg Orders

Primary Peg Orders are orders to buy at the NBB, or sell at the NBO, a stated amount of a security that are to be executed only in ASPEN. Orders may be submitted with or without a limit price. Primary Peg Orders may be displayed or non-displayed at the Subscriber's discretion. If a displayed Primary Peg Order would lock or cross contra-side interest displayed inside the ATS or as part of the NBBO, such order will be displayed one minimum price variation less aggressive than the price of displayed contra-side interest inside the ATS or as part of the NBBO and ranked at the price of displayed contra-side interest inside the ATS or as part of the NBBO. In the event the displayed contra-side interest inside the ATS or the NBBO updates, such order's displayed price will be updated to the most aggressive price permissible without locking displayed contra-side interest inside the ATS or the NBBO, up to the order's limit price, and such order's ranked price will be updated to the most aggressive price permissible without crossing displayed contra-side interest inside the ATS or the NBBO, up to the order's limit price.

Marketable Peg Orders

Marketable Peg Orders are orders to buy at or below the NBO, or sell at or above the NBB, a stated amount of a security that are to be executed only in the ASPEN book. Orders may be submitted with or without a limit price. Marketable Peg Orders will be non-displayed.

Limit Orders

Limit Orders are orders to buy or sell a stated amount of a security at a specified price or better that are to be executed only in the ASPEN book.. Limit Orders may be displayed or non-displayed at the Subscriber's discretion. If a displayed Limit Order would lock or cross contra-side interest displayed inside the ATS or as part of the NBBO, such order will be displayed one minimum price variation less aggressive than the price of displayed contra-side interest inside the ATS or as part of the NBBO and ranked at the price of the displayed contra-side interest inside the ATS or as part of the NBBO. In the event the displayed contra-side interest inside the ATS or the NBBO updates, such order's displayed price will be updated to the most aggressive price permissible without locking displayed contra-side interest inside the ATS or the NBBO, up to the order's limit price, and such order's ranked price will be updated to the most aggressive price permissible without crossing displayed contra-side interest inside the ATS or the NBBO, up to the order's limit price.

Market Orders

Market Orders are orders to buy or sell a stated amount of a security that is to be executed at or in between the NBBO only in ASPEN. Market Orders will be non-displayed.

Add Liquidity Only

Subscribers may designate orders as Add Liquidity Only ("ALO"). ALO orders are to be entered only in ASPEN. ALO orders are Limit or Primary Peg orders that rest on the order book instead of the order being able to execute against contra interests that are already on the book at the same price or better price. ALO orders will only interact with other orders if the ALO order would be adding liquidity. Generally, for two given orders the one received first by the matching engine will be deemed to be adding liquidity.

Time-in-Force

The ATS will accept orders with time-in-force instructions of Day, IOC, and Good Till Time. Day will be the default time-in-force instruction. Day orders will be held by the ATS on its books from the time of receipt until the end of Regular Trading Hours. If unfulfilled by the end of Regular Trading Hours, such Day orders will be canceled and the Subscriber who submitted the order will be notified. IOC orders in ASPEN will be held until the completion of the next Match Event, and if unexecuted, will be canceled. IOC in combination with the Midpoint Peg instruction is processed as a Midpoint Peg Order with Time-in-Force Instruction. IOC orders may be submitted with or without a limit price. IOC orders will be non-displayed. Good Till Time orders are eligible for use in the Midpoint book and Hosted Pools and will be held by the ATS on its books from the time of receipt for an amount of time specified by the Subscriber in milliseconds, and if unexecuted, will be canceled. A Good Till Time order will be held for a time that allows it to participate in at least one Match Event even if the order would normally be canceled prior to the Match Event.

Not Held

All orders entered into the ATS by Subscribers are Not Held.

Open Orders

All open orders are canceled at the end of the trading day.

Routing

IntelligentCross does not support the routing of orders to any other venue.

Message Priority

Incoming orders and related messages are processed in the order in which they are received by the ATS.

Match Priority

Please see Item 11 for a description of the ATS's match priority criteria.

Order Amendment

An open order may be amended by Subscribers to the extent the amendment is received by the ATS before a Match Event involving that order occurs. Order amendments are processed in the order in which they are received by the ATS. The match priority of an order will be preserved when amending the quantity of an order to a value less than the existing quantity of the order; however, the match priority of an order will be lost when amending the quantity of an order to a value greater than the existing quantity or when amending any other value in addition to the quantity of the order.

Order Cancellation

An open order may be canceled by Subscribers to the extent the cancellation order is received by the ATS before a Match Event involving that order occurs. Cancellation orders will cancel all remaining open quantity on an order. Cancellation orders are processed in the order in which they are received by the ATS.

Hosted Pools

The ATS may setup a Hosted Pool, only at the request of a Subscriber, where such Subscriber will designate that ~~an order trading interest~~ interact with other ~~order trading interest~~ entered by that same Subscriber, or with other Subscribers participating in the same Hosted Pool. ~~The While the ATS does not restrict Subscribers from requesting to setup a Hosted Pool, the~~ setup of a ~~hosted pool~~ Hosted Pool is at the ATS' discretion, and ~~must be approved by~~ the ATS. ~~The ATS~~ will determine whether or not to offer a Hosted Pool ~~functionality on a Subscriber-by-Subscriber basis, with the ATS making its. The~~ determination ~~based on current and is made by assessing, primarily, the~~ expected order flow volume. ~~Notwithstanding the foregoing, the procedures for trading in a~~ Hosted Pool ~~are the same for all Subscribers of that Subscriber.~~

Each ~~individual~~ Hosted Pool ~~participation~~ is limited to the Subscriber on behalf of whom the Hosted Pool was setup and only those Subscribers that were invited by the Subscriber setting up the pool to participate in such Hosted Pool. ~~The ATS does not determine the Subscribers invited to participate in a Hosted Pool. Subscribers are not subject to any specific quoting or liquidity requirements. The ATS, however, will periodically review the activity of each Subscriber in the Hosted Pool and may request that the Subscriber alter their activity (e.g., provide more order flow). Subscribers that fail to act in a manner that the ATS, in its discretion, deems satisfactory may lose access to the Hosted Pool service.~~

In addition, both the Subscriber setting up a Hosted Pool, and those Subscribers invited to participate in a Hosted Pool, are subject to the ATS' eligibility and exclusion requirements as described in Part III, Items 2 and 3.

The procedures for trading in a Hosted Pool are the same for all Subscribers. Subscribers may enter ~~such order trading interest~~ in either a principal or agency capacity.- An order designated to interact within a Hosted Pool can be designated to only interact with that Hosted Pool or can also be designated to interact with the liquidity outside the Hosted

Pool after checking for liquidity available in that Hosted Pool. ~~In particular, during The default state is for an order to only interact with that Hosted Pool.~~

During a Match Event, the matching engine will, in sequential order: (1) match orders eligible to be matched in Hosted Pools, and then (2) match orders from Hosted Pools with orders outside the Hosted ~~Pool~~Pools, including orders designated to interact first in a Hosted ~~Pool~~Pools and then outside ~~a Hosted Pool~~ of Hosted Pools. Matching processes, procedures and parameters are the same for Match Events whether they occur in Hosted Pools or outside of Hosted Pools. The ATS's only difference, as noted above, is the time when such Match Events may occur.

The ATS' Hosted Pools also accept "Conditional Orders." Conditional Orders are not accepted outside of the ATS's Hosted Pools. The ATS's Hosted Pools permit the publication of indications of interest ("IOIs"), which allow participants of a Hosted Pool to send IOIs to any other participant of that Hosted Pool. IOIs contain symbol, side and size. See Part III, Item 9 for a discussion of Conditional Orders and IOIs.

Block IOIs

The ATS offers a Block IOI service in its Hosted Pools only to Sponsored Firms. The ATS, through the Block IOI service, informs Sponsored Firms of contra liquidity in a designated Hosted Pool by responding to IOIs sent by the Sponsored Firm. Block IOIs contain the same information as other IOIs in the Hosted Pools, i.e., symbol, side and size. There also is no minimum size requirement applicable to the Block IOI service. Once informed of a possible match through the Block IOI process, the Sponsored Firm can send a firm order directly to the designated Hosted Pool in the ATS. Block IOIs and the associated processes are described further in Part III, Item 9.

VWAP Orders

The ATS accepts "VWAP Orders" only in the Hosted Pools, and any Subscriber in a Hosted Pool can utilize VWAP Orders.

VWAP Orders follow a similar workflow with regards to the invitation and firm up process as Conditional Orders (as discussed in Part III, Item 9) with certain exceptions. The primary differences include: VWAP Order invitations are only on a one-to-one basis; VWAP Orders have a particular time frame in which to firm up; VWAP Order invitations include matched quantity; and short sale VWAP orders are not accepted in short sale restricted securities.

The matching of VWAP Orders uses price, size, and time priority. VWAP Orders only match with other VWAP Orders. VWAP Orders have a minimum order time (i.e., one (1) minute) and a maximum order time (which is set by the Subscriber), indicating the time period over which to calculate the VWAP. To match, each order's minimum match time must not exceed the maximum match time of the opposing order. The VWAP also must end prior to the end of the trading day.

Once a match is identified, invites are sent to both parties with additional information - match quantity and match time. VWAP Order invitations are sent automatically by the ATS based on the priority stated above only on a one-to-one basis, i.e., only a single invite will be sent, which could generate a single firm up. Match quantity is the smaller of the two quantities of the two orders matched and match time is the smaller of the two specified maximum order times.

Both sides have 500 milliseconds to firm-up by submitting a firm up order in response to the invite. The firm up order will be a limit order with a limit price. Firm up orders that are market orders are rejected. If both parties do not firm up, the VWAP is cancelled, and the party that has firmed-up will receive a cancellation. If a party responds after 500 milliseconds, they will receive a rejection, or if they do not respond, the VWAP is cancelled. Only when both sides firm-up, the VWAP calculation interval begins. Both parties will receive a restatement message to indicate the start of the VWAP calculation interval.

The VWAP is calculated by collecting all executed trades reported via the SIP during the specified interval (with the exception of certain trades with particular condition codes, which are systematically implemented by the ATS). At the end of the calculation interval, both parties will receive a single VWAP execution with a corresponding single price in an execution report. Pursuant to Rule 611 of Regulation NMS, for VWAP Orders, executions may occur outside of the prevailing NBBO.

A VWAP Order can be cancelled at any time. If either firm up order is cancelled within the minimum time requirement (i.e., one (1) minute), then no VWAP print will be returned and there will be no partial fill, and the remaining firm up order will be cancelled. If the firm up order is cancelled during the VWAP calculation interval (after the minimum time requirement), then the quantity filled will be proportional to the elapsed VWAP time and the VWAP price will be the VWAP for the elapsed interval. The minimum quantity (one (1) share) also must be met to allow for a partial fill. In the event a security becomes subject to a trading halt during the VWAP calculation, the firm up orders will be cancelled and no executions will occur. Once a VWAP calculation has started, the only option is to cancel the VWAP Order, and no modifications can be made.

If the calculated VWAP price breaches the specified limit price, and this occurs prior to the minimum time requirement (i.e., one (1) minute), then there will be no partial fills. If the breach occurs after the minimum time requirement, then the quantity filled will be proportional to the elapsed VWAP time, and the VWAP price will be the VWAP for the elapsed interval. The trade that caused the VWAP price to breach will be excluded from the VWAP calculation. If there are no trades during the VWAP calculation interval, then the midpoint of NBBO at the end of the interval will be used for the VWAP price.

If a trade correction/cancellation occurs for a trade that is part of the VWAP calculation, then the final VWAP price will reflect this trade correction/cancellation. Specifically, if the correction or cancellation of the trade results in the VWAP price violating a limit

price constraint for either of the counterparties, then the VWAP trade will be cancelled. The cancellation/correction can happen during or after the VWAP calculation interval. In both cases, the VWAP trade will need to be manually corrected.

- 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.

Answer: The minimum units of trading for NMS Stocks traded on the ATS is one share. Only orders that are \$100,000,000 or less in notional value will be eligible for trading on the ATS. Such size requirements are applicable to all trading interest.

Additionally, the ATS offers minimum and maximum quantity modifiers for execution. A minimum quantity modifier allows Subscribers to request a minimum share amount on an execution, such that if the available liquidity is below the minimum quantity amount, the order will not execute. Subscribers may set the minimum quantity to permit the aggregation of contra-side interest to meet the minimum quantity requirements. A maximum quantity modifier allows Subscribers to request a maximum share amount on an execution, such that an order would not execute against any orders that have a size greater than the maximum share amount. For example, if a Subscriber set a maximum quantity of 200 shares, the order would not execute against any orders that have an order quantity greater than 200 shares. The maximum quantity modifier is for Midpoint Peg Orders only. Such minimum and maximum quantity modifiers are applicable to all trading interest.

- 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).

Answer: Odd lot orders are handled the same as round lot orders and are treated the same for priority purposes.

- 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 ☐ No

If no, identify and explain any differences.

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

☒ Yes ☐ No

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

Answer: Mixed lot orders are handled the same as round lot and odd-lot orders and are treated the same for priority purposes.

- 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 ☐ 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).

Conditional Orders

The ATS's Hosted Pools accept "Conditional Orders." The ATS does not accept Conditional Orders outside of the ATS' Hosted Pools and Conditional Orders cannot interact outside of the Hosted Pools. A Conditional Order also must contain the same information as a firm order.

A Conditional Order is an instruction to the ATS that the Subscriber wants to interact with the Hosted Pool on a conditional basis. A Conditional Order never executes; instead, in the event eligible contra-party interest exists in the Hosted Pool, whether such contra-party interest is a firm or Conditional Order, the ATS will cancel the Conditional Order, will notify the Subscriber submitting the Conditional Order via FIX (the "Invite"), and request that the Subscriber "firm-up" by submitting a firm order in response to the Invite ("Firm-Up Orders"). For purposes of determining whether to generate an Invite, only contra-side interest that would have permitted an execution at the time of the match (had both the Conditional Orders and contra-side interest been firm orders), including satisfying the Conditional Order's minimum quantity size requirement, are considered "eligible." A single eligible contra-side order may generate multiple Invites. For example, where two Conditional Orders are resting on the ATS and a single eligible contra-side order is submitted, both Conditional Orders will receive Invites.

A Firm-Up Order must contain the same symbol and side as the Conditional Order related to the Invite or it will be rejected by the ATS. A Firm-Up Order must be designated to interact with (1) the Hosted Pool, or (2) the Hosted Pool and then the liquidity outside the Hosted Pool after checking for liquidity in the Hosted Pool. The Firm-Up Orders will have a time-in-force of one (1) second, after which any unfilled portion will be canceled. The Firm-Up Orders are treated like "standard" firm orders for matching and priority purposes. A Firm-Up Order does not need to be submitted within a specified time period after an Invite is sent.

Indications of Interest

The ATS's Hosted Pools also provides certain services relating to indications of interest ("IOIs").

IOIs

The ATS' Hosted Pools permit the publication of indications of interest (“IOIs”), which allow participants of a Hosted Pool to send IOIs to any other participant of that Hosted Pool. IOIs contain symbol, side and size only.

The ATS's Block IOI

The ATS provides a separate service from IOIs and Conditional Orders, a “Block IOI” service, only in the Hosted Pools to (1) have the ATS inform non-Subscriber clients (“Sponsored Firms”) of contra liquidity in a designated Hosted Pool by responding to IOIs sent by the Sponsored Firm to the ATS and (2) to allow such Sponsored Firms to send firm orders directly to the designated Hosted Pool via a sponsored access FIX session of a Subscriber sponsoring the Sponsored Firm (“Sponsor”). The only place where the Sponsor/Sponsored Firm relationship exists in the ATS is in the context of the Block IOI service.

Similar to other IOIs in the ATS, Block IOIs contain symbol, side and size only. IOIs are ranked as they are entered into the ATS in the same manner as other trading interest in the ATS, i.e., according to the ATS' match priority criteria. There also is no minimum or maximum size requirement specifically applicable to the Block IOI service. Block IOIs, which are generated by the Sponsored Firm, are not visible to any participant in Hosted Pools, in contrast to IOIs which participants in Hosted Pools can elect to generate and be made visible to other Hosted Pool participants.

Sponsored Firms may be authorized by multiple Sponsors and, as a result, Sponsored Firms are required to have a designated Sponsor for each firm order submitted. Sponsored Firms are clients of the Sponsor and not the ATS, and the Sponsor is responsible for all firm orders on which it is designated as Sponsor entered into the ATS by its Sponsored Firms.

Incoming IOI messages in the Block IOI service from the Sponsored Firm will be checked, in no particular order, against the following in the designated Hosted Pool for a possible match:

- Resting firm orders
- Conditional orders
- IOIs from other Sponsored Firms (generated from separate FIX sessions)

If there is contra-side interest in the Hosted Pool, a response, or “Request for Commitment” message, is sent back by the ATS to the Sponsored Firm. Partial amounts of the requested IOI size will generate a Request for Commitment. Only one response will be sent for each IOI, unless the IOI is updated (e.g., for a change in size), then, if applicable, another response will be sent.

In the Block IOI service, participants of the Hosted Pool – those who have firm or conditional orders - are not informed if there is a possible match (e.g., if the IOI matches with a conditional order in the Hosted Pool, no invite is sent for that conditional order); only the sender of the IOI is informed of the possible match via the “Request for Commitment” message. If there is a match with an IOI from another Sponsored Firm, both IOIs will receive a Request for Commitment message. If there is no immediate contra liquidity or match, then the IOI remains active. IOIs, however, will be cancelled at the end of the day.

In addition, for the Block IOI service, every new marketable incoming order (firm and conditional) and IOI (from another Sponsored Firm) to the Hosted Pool with the same symbol and opposite side is compared with the IOI for a possible match. Every change to NBBO (which can change the set of marketable orders) also triggers a contra liquidity check for active IOIs (i.e., IOIs that have not yet been responded to).

Also, if there is an update to an IOI, the IOI will receive a new timestamp and it is compared again with all applicable marketable orders in the Hosted Pool. In a situation where a Request for Commitment is sent out and the IOI is updated or canceled before a firm order committing shares is received, then the Request for Commitment will be cancelled, and if a firm order is sent, it will be rejected.

Finally, once informed of a possible match, the Sponsored Firm can send a firm order directly to the designated Hosted Pool, and the firm order must be associated with the particular Sponsor and the particular Request for Commitment. All firm orders sent will be subject to risk limits imposed on a Sponsored Firm by a Sponsor.

The ATS's Hosted Pools also accept "VWAP Orders." The ATS does not accept VWAP Orders outside of the ATS's Hosted Pools.

VWAP Orders follow a similar workflow as Conditional Orders with regards to the invitation and firm up process with certain exceptions. For more information on VWAP Orders, please see Part III, Item 7.

- 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 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.

Answer:

The ATS operates two different matching models: (1) a Midpoint book ("Midpoint") that only accepts non-displayed midpoint orders and executes orders at the midpoint of the prevailing NBBO at the time of the Match Event, and (2) ASPEN (or the "Adverse Selection Protection Engine"), three limit order books with optional displayed capability (i.e., orders in ASPEN may be marked by Subscribers as either displayed or non-displayed) which execute orders at prices that are at or between the prevailing NBBO at the time of the Match Event. Subscribers choose which matching model to which they send their orders. While the matching models operate under the same "market participant identifier" (or "MPID") – INCR – each matching model is distinct and does not interact with the other matching model.

The ASPEN matching model has three distinct books distinguished by different fee structures – ASPEN Fee/Fee, ASPEN Maker/Taker and ASPEN Taker/Maker. All three books act independent of each other; orders resting in one book do not rest on or interact with orders resting in another book. All three ASPEN books also operate with different MIC codes: ASPEN Fee/Fee - ASPN; ASPEN Maker/Taker - ASMT; and ASPEN Taker/Maker - ASPI.

The Midpoint book only accepts Midpoint Peg Orders, which are not accepted in any of the ASPEN books; orders in the Midpoint book will therefore not be displayed. Any orders entered into IntelligentCross through any other order type (e.g., Market Order, Limit Order, Primary Peg Order (with or without a limit price), and Marketable Peg Order (with or without a limit price)) will default to the ASPEN Fee/Fee book. A subscriber who wishes to trade in the ASPEN Maker/Taker or Taker/Maker books must affirmatively identify those books when entering their order. Subscribers can route to the different ASPEN books by utilizing FIX tags to specify which ASPEN book to send their order to, and can also request dedicated sessions to specific books.

- 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.

Answer:

The ATS accepts orders in all NMS Stocks eligible for trading (*e.g.*, those that are not subject to a trading halt) and uses a matching mechanism which is near-continuous and that matches orders at scheduled times ("Match Events"). The ATS' two different matching models – Midpoint and ASPEN - contain the following characteristics (any differences between the matching models will be noted accordingly).

Determination of Matching Schedule

Matching schedules are calculated using an optimization process that uses, among other things, historical performance measurements (as discussed below) from prior days' and/or current days'(in the case of Midpoint) matches. Each security has an individualized matching schedule, computed to maximize price stability after trades. The optimization process is data driven and takes into account stock by stock volatility, spreads, daily trading volume, price stability after trades and other market factors characteristic of how the specific stock recently traded in the market and on the IntelligentCross platform.

For ASPEN, matching schedules are calculated using an overnight optimization process that uses historical performance measurements from prior days' matches. Each day starts with a prepared matching schedule for each security that does not change throughout the day.

For Midpoint, the matching schedule for a security may change overnight, or during the trading day if the ATS's machine-learning process determines that such change is appropriate to maximize price stability after trades. For Midpoint, while the matching schedule for a security may change during the trading day, the model governing the optimization process does not change throughout the trading day. The optimization process takes into account publicly available market data such as prior SIP trades and NBBO quotes. There is no human intervention or discretion involved in any change to the matching schedule during the trading day, and any such change does not alter any conditions (including price) of any orders nor is it aware of or responsive to any customer specific information.

Match Events in each security occur at scheduled times as determined by the ATS' matching algorithm. Match schedules are defined by "minimum/maximum time bands" for each security ("Match Event Intervals"). Midpoint has Match Event Intervals between 150 microseconds and up to 200 milliseconds that are calibrated on a security-by-security basis. ASPEN's Match Event Intervals can have a minimum time of 150 microseconds and a maximum time of 900 microseconds (*i.e.*, the maximum time for scheduling a match event is capped at 900

microseconds), also calibrated on a security-by-security basis. For example, on a particular day, the match event band for XYZ stock may have a minimum time of 450 microseconds and a maximum time of 600 microseconds. The actual match event time is randomized within the match event band throughout the course of the trading day.

Execution of Orders and Match Events

Any order for a security that arrives prior to a Match Event for that security (and that has not been canceled, has become unmarketable, or has been repriced prior to the match event) will be eligible to participate in the next Match Event. Match Events are scheduled continuously while the IntelligentCross book is in a "matchable state" (*i.e.*, there is an order on each side eligible to match); if there are no orders for a stock in the book, no Match Event will be scheduled. An incoming order that will make the book potentially matchable will trigger a scheduling of a Match Event if one has not already been scheduled.

The matching process is completely symmetric, *i.e.*, the match times within IntelligentCross are not chosen to favor a particular side of the trade. No Subscribers (or non-Subscribers accessing IntelligentCross through a Subscriber) are given any type of priority through the matching process, and the matching process is blind to the identity of the Subscriber (or a non-Subscriber accessing IntelligentCross through a Subscriber). Both sides of the trade (buyers and sellers) are on equal footing for the next scheduled match, while maintaining full control of their orders - both sides can cancel or update their orders at any time prior to the match.

Open orders may be amended to the extent the amendment is received before a match event involving that order occurs. Order amendments are processed in the order in which they are received by the ATS. The match priority of an order will be preserved when amending the quantity of an order to a value less than the existing quantity of the order; however, the match priority of an order will be lost when amending the quantity of an order to a value greater than the existing quantity or when amending any other value in addition to the quantity of the order.

An open order also may be canceled to the extent the cancellation order is received before a match event involving that order occurs. The ATS will automatically update its quotations, and all quotation updates, including those due to new or canceled orders, are immediate.

Midpoint Match Event Intervals

At each Match Event for each security in Midpoint, the matching engine for the Midpoint book will retrieve the current NBBO and check its book for orders that can be matched. Orders eligible for matching will be matched in time priority at

the NBBO midpoint price at the Match Event. The purpose of the scheduled matches is to achieve two objectives: (1) provide for as many matches as possible to maximize liquidity; and (2) keep the NBBO as stable as possible for a period of time after executions occur on the ATS. During the time between Match Events, Subscribers have full order control and can cancel or reprice orders until the next Match Event.

The ATS then analyzes the executions that occur on the ATS, including in Hosted Pools, and adjusts the Match Event Interval to achieve the two objectives described above. The optimization process takes into account publicly available market data such as prior SIP trades and NBBO quotes. The optimization process is data driven and takes into account stock by stock volatility, spreads, daily trading volume, price stability after trades and other market factors characteristic of how the specific stock recently traded in the market and on the IntelligentCross platform.

The ATS makes a determination as to whether the Match Event Intervals for each security should be increased, decreased, or stay the same. The Match Event Intervals per security are adjusted after enough data points have been accumulated to warrant an adjustment. The Match Event Intervals for Midpoint may be recalibrated throughout the day. Registered Persons of the ATS review and approve such changes.

ASPEN Match Event Intervals

ASPEN will have Match Event Intervals between 150 and 900 microseconds that are calibrated on a security-by-security basis. The process for determining the Match Event Intervals for ASPEN is similar to that for Midpoint but Match Event Intervals are calibrated separately such that, for any given security, the Match Event Intervals for ASPEN will be different from the Match Event Intervals for Midpoint. The Match Event Intervals for the three ASPEN books will be the same for a given security.

The ATS makes a daily determination as to whether the Match Event Intervals for each security should be increased, decreased, or stay the same.

Midpoint Minimum Resting Period

For Midpoint, only orders that have rested on the order book for a minimum period of time are eligible to match. "Minimum Resting Periods" are determined by the ATS and set in a stock-specific fashion, similar to Match Events. The purpose of these periods is to further reduce adverse selection. However, in no event will the minimum resting period exceed 200 milliseconds. There are no Minimum Resting Periods for orders on ASPEN.

Anti-Internalization

The ATS provides an "anti-internalization" setting to its Subscribers. This setting can be enabled upon client request and will prevent the self-matching of two orders from the same Subscriber on the ATS's order books. This setting will not be enabled by default, but can be enabled upon Subscriber request and will be enforced by the Client ID setting. Subscribers can either contact IntelligentCross Trading Operations to enable this functionality on an MPID basis or they can configure the trading systems to prevent self-crossing at a client or trading desk level.

Locked or Crossed Market

The ATS will not match if the NBBO as determined by the SIP and/or SRO proprietary data feeds for the stock is crossed (where the NBB price exceeds the NBO price) or if the NBBO as determined by the SIP and/or other SRO proprietary data feeds is locked (where the NBB price equals the NBO price). In ASPEN, if a displayed Limit Order or Primary Peg Order would lock or cross displayed contra-side interest inside the ATS or the NBBO, such order will be displayed one minimum price variation less aggressive than the price of the displayed contra-side interest inside the ATS or as part of the NBBO and ranked at the price of displayed contra-side interest inside the ATS or as part of the NBBO. In the event the displayed contra-side interest inside the ATS or the NBBO updates, such order's displayed price will be updated to the most aggressive price permissible without locking displayed contra-side interest inside the ATS or as part of the NBBO, up to the order's limit price, and such order's ranked price will be updated to the most aggressive price permissible without crossing displayed contra-side interest inside the ATS or as part of the NBBO, up to the order's limit price.

Sub-Dollar Pricing

For orders in Midpoint, in the event that the NBB is less than \$1.00, the ATS will execute orders at the midpoint price, regardless of the number of decimal places.

For orders in ASPEN, in the event that the NBB is less than \$1.00, the ATS will execute orders at valid prices within the NBBO.

Orders Eligible for Matching

With respect to the Midpoint book, the following orders will be eligible for matching during a Match Event:

1. Midpoint Peg Orders that are buy orders with limit prices equal to or higher than NBBO midpoint.

2. Midpoint Peg Orders that are sell orders with limit prices equal to or lower than NBBO midpoint.
3. Midpoint Peg Orders without limit prices.

Midpoint Peg Orders also may be designated with Time-in-Force instructions.

With respect to the ASPEN books, the following orders will be eligible for matching during a Match Event:

1. Primary Peg Orders with no limit price or those with limit prices that are within the prevailing NBBO at the time of a Match Event.
2. Market Peg Orders with no limit price or those with limit prices that can execute within the prevailing NBBO at the time of a Match Event.
3. Limit Orders with limit prices that are within the prevailing NBBO at the time of a Match Event.
4. Market Orders.

Match Priority Criteria

Midpoint Match Priority Criteria

In Midpoint, orders eligible for matching will be matched in time priority at the NBBO midpoint price at the Match Event. Only orders that have rested on the Midpoint book for a minimum period of time (i.e., the Midpoint Minimum Resting Period) are eligible to match. An order on the Midpoint book for less than its Midpoint Minimum Resting Period would not be eligible to participate in any Match Events but would be eligible for all subsequent Match Events after satisfying its Midpoint Minimum Resting Period.

Following are some examples of how the IntelligentCross match priority criteria works for the Midpoint book.

Example 1: The assumptions include:

- The NBBO for Security XYZ is \$10.10 x \$10.12
- Subscriber A has a resting Midpoint Peg Order to sell 100 shares of Security XYZ with a limit of \$10.11.
- Subscriber B has submitted a Midpoint Peg Order to buy 100 shares of Security XYZ with a limit of \$10.11.
- The Midpoint book enters into a "matchable state" (i.e., there is an order on each side eligible to match) and a Match Event is scheduled.

- Security XYZ has a Match Event Interval between 1000 to 1300 microseconds, and in this example the Match Event is scheduled to occur in 1100 microseconds.
- During the 1100 microseconds, Subscriber C has submitted a Midpoint Peg Order to buy 100 shares of Security XYZ with a limit of \$10.11.
- At the next scheduled Match Event for Security XYZ, the matching engine retrieves the NBBO and determines that the NBBO is still \$10.10 by \$10.12. As a result, the following executions occur during the Match Event (assuming all orders have met the Midpoint Minimum Resting Period):
- Subscriber A will match 100 shares with Subscriber B at \$10.11.
- Subscriber C's order will not match with Subscriber A as orders will be matched in time priority at the NBBO midpoint price at the Match Event. Subscriber C's order will be eligible for the next Match Event.

Example 2: Assume in the above Example 1 that Subscriber C has submitted a Midpoint Peg Order to buy 100 shares of Security XYZ with limit of \$10.12. At Match Event time:

- Subscriber A will match 100 shares with Subscriber B at \$10.11.

While Subscriber C has submitted a more aggressively priced order, Subscriber C's order will not match with Subscriber A as orders in Midpoint will be matched in time priority at the NBBO midpoint price at the Match Event. Subscriber C's order will be eligible for the next Match Event.

ASPEN Match Priority Criteria

The first step in determining match priority in the ASPEN book occurs prior to the book entering into a matchable state. Prior to entering into a matchable state, IntelligentCross gathers orders in its system and such orders' match priority will be based on price, display type (*i.e.*, with respect to ASPEN, at each price level, displayed orders will have priority over non-displayed orders), and the time at which such orders are received relative to other orders.

The second step in determining match priority occurs after the ASPEN book enters into a matchable state. After the ASPEN book enters into a matchable state, the match priority for any orders that arrive between that time and before the Match Event will be based solely on the time of their receipt by the ATS, *i.e.*, sequentially in order of arrival.

In match events, price improvement (if there is any) will be provided to the order with the later effective timestamp between the two orders receiving an execution.

Any order for a security that arrives prior to a Match Event for that security (and that has not been canceled, has become unmarketable, or has been repriced prior to the match event) will be eligible to participate in that Match Event.

Following are some examples of how the IntelligentCross match priority criteria works for the ASPEN book.

Example 1: The assumptions include:

- Subscriber A has submitted a non-displayed 100 share buy limit order with a limit price of \$10.10 and TIF of Day for Security XYZ.
- Subscriber B has submitted a non-displayed 100 share sell limit order with a limit price of \$10.10 and TIF of Day for Security XYZ.
- The ASPEN book enters into a "matchable state" (*i.e.*, there is an order on each side eligible to match) and a Match Event is scheduled.
- Security XYZ has a Match Event Interval between 175 to 250 microseconds, and in this example the Match Event is scheduled to occur in 180 microseconds.
- During the 180 microseconds (*i.e.*, after the ASPEN book enters into a matchable state) and before the Match Event occurs, Subscriber C submits a non-displayed 100 share buy limit order with a limit price of \$10.11 and TIF of Day for Security XYZ.

At the next scheduled Match Event for Security XYZ, the matching engine retrieves the NBBO and determines that the NBBO is \$10.10 by \$10.11. As a result, the following executions occur during the Match Event:

- Subscriber A will match 100 shares with Subscriber B at \$10.10.
- Subscriber C's order will not match with Subscriber B as the IntelligentCross match priority criteria provides priority to the orders on each side that were eligible to match and that set the price and created the matchable state (orders of Subscriber A and Subscriber B). Subscriber C's order will be eligible for the next Match Event.

Example 2: Assume in the above Example 1 that Subscriber B had 200 shares to sell. At Match Event time:

- Subscriber A will match 100 shares with Subscriber B at \$10.10

- Subscriber C will be price improved and will match 100 shares with Subscriber B at \$10.10.

Example 3: Assume in the above Example 1 that during the 180 microseconds (*i.e.*, after the ASPEN book enters into a matchable state) and before the Match Event occurs, Subscriber A cancels its order. At Match Event time:

- Subscriber C will match 100 shares with Subscriber B at \$10.10.

Example 4: Assume in the above Example 1 that Subscriber C's order was priced at \$10.10 but was displayed. At Match Event time:

- Subscriber A will match 100 shares with Subscriber B at \$10.10
- Subscriber C's order will not match with Subscriber B as once the ASPEN book enters into a matchable state, the match priority for any orders that arrive between that time and before the Match Event will be based on the time of their receipt by the ATS; displayed orders do not have priority over non-displayed orders during that time period.

Example 5: Assume in the above Example 1 that during the 180 microseconds (*i.e.*, after the ASPEN book enters into a matchable state) and before the Match Event occurs, Subscriber D submits a non-displayed 100 share sell limit order with a limit price of \$10.10 and TIF of Day for Security XYZ. At Match Event time:

- Subscriber A will match 100 shares with Subscriber B at \$10.10
- Subscriber C will match 100 shares with Subscriber D at \$10.11.

General Match Priority Criteria Information

The match priority criteria in a Hosted Pool are generally the same as in the ATS. For the purpose of Hosted Pools only, Midpoint Peg Orders are not subject to the Midpoint Minimum Resting Period.

Matching instructions are specified in accordance with the FIX protocols described above in Part III, Item 5 and defined by industry standard FIX tags defined for these matching instructions.

Orders received by the ATS during the Pre-Market Order Acceptance Period will be queued until the beginning of Regular Trading Hours and then matched with time priority based on the order receipt by the ATS. Orders received outside these periods will not be accepted. For all eligible securities, the ATS will only execute if Limit-Up-Limit-Down ("LULD") bands are present and the effective price of a potential match is not constrained by a LULD band.

For purposes of the operation of the ATS, all orders will be timestamped upon receipt by the ATS in nanoseconds; however, the ATS has the ability to provide order records in microseconds or milliseconds via FIX.

An amendment of an outstanding order will affect its match priority and Minimum Resting Period as follows:

1. If an order's size is decreased, its timestamp will remain the same, its priority will not change and it will not wait through a new Minimum Resting Period (in the case of Midpoint).
2. If an order's size is increased, the timestamp will be renewed, its priority will change and, if part of Midpoint, it will wait through a new Minimum Resting Period.
3. If an order's price is changed, the timestamp will be renewed, its priority will change and, if part of Midpoint, it will wait through a new Minimum Resting Period.

IntelligentCross conducts trading strictly in an agency capacity on the ATS. IntelligentCross does not conduct trading in a proprietary capacity.

Non-Match Events

Situations may occur where an incoming order may not execute against a resting order at match event time, such as when:

- (1) an existing resting order cancels prior to the next match event
- (2) an incoming order is canceled prior to the next match event
- (3) the NBBO moves between the time an order is received and the next match event takes place, making either the incoming order or the resting order non-marketable
- (4) the NBBO changed before the next match event and pegged orders were repriced to the new NBBO, making the incoming order or the resting pegged order non-marketable

Execution Errors

The ATS has written supervisory policies and procedures in place to handle trade execution errors and "clearly erroneous trades." Each potential error situation will be evaluated by the ATS's personnel on a case by-case basis.

If a trade is transacted in error and it is determined that the error was due to a system failure or other issue with the ATS's platform that resulted in a poor execution (*i.e.*, outside the NBBO), the ATS will contact each of the Subscribers associated with the error cross trade and inform them that the ATS is canceling the trade. The ATS will then initiate the cancel on the ATS and communicate either

electronically (ACT Web for NASDAQ TRF) or over the telephone (NYSE TRF) the trade report cancellation for each side of the cross trade. In the instances in which the trade was good (*i.e.*, inside the NBBO), and as a result of a systems issue, the ATS failed to acknowledge the execution to one of the two Subscribers associated with the error cross trade transacted on the ATS, the ATS will contact the affected Subscriber and ask whether or not they want to maintain (keep) the trade. If the Subscriber does not want to maintain the trade, the ATS will take the affected Subscriber's position and book it to IntelligentCross' error account. IntelligentCross will then instruct IntelligentCross' clearing broker to trade out of the error position. An IntelligentCross employee will book the error position and subsequently close-out the transaction through IntelligentCross' error account for settlement purposes and document within IntelligentCross' systems all details regarding the error transaction(s). The error transaction detail will include all details surrounding the error trade(s) and subsequent close-out trades (if any). The detail will also include an identification of all associated parties, the cause/reason for the error, or details surrounding Subscriber contact(s). The error trade detail will then be reviewed and electronically signed off as "compliance review" by the CCO or his designee and subsequently reviewed and signed off on as "Supervisory Review" by IntelligentCross' CEO or his/her supervisory principal designee.

The ATS will also ensure accurate CAT reporting.

With respect to a market wide event that may contain clearly erroneous transaction, the ATS monitors all email notification regarding clearly erroneous transactions. Upon receipt of a clearly erroneous e-mail notification, the ATS will immediately review the ATS's trading activity during the relevant timeframe to determine whether or not the ATS traded the securities referenced in the notification. The ATS will then take immediate action (if any executions have been identified through the review) to reverse the trades upon the ATS and NASDAQ's WebLink ACT. A file in IntelligentCross' systems will be created that documents any ACT reversals that have been performed as a result of a clearly erroneous notification.

Order Entry Restrictions

The ATS will not accept orders that reference a symbol not authorized for trading (*e.g.*, if there is a trading halt). The minimum price variation ("MPV") for orders received by the ATS shall be \$0.01 for orders priced \$1.00 or greater, and \$0.0001 for orders priced below \$1.00. Orders received with increments below the MPV will be rejected.

Sell orders must be designated as long, short or short exempt in the event there is a short sale restriction in place. Subscribers are responsible for the compliance of their trades with all short sale locate and delivery rules and regulations.

Anonymity

All orders and executions are anonymous as to and between Subscribers. Subscribers are only made aware of IntelligentCross as a party or contra-party on orders and executions.

The ATS does not provide any means of communication between Subscribers. There is no negotiation, chat, instant message, indication of interest, "Flash Order," or similar functionality provided.

Hosted Pools

The ATS may setup a Hosted Pool, at the request of a Subscriber, where such Subscriber will designate that an order interact with other orders entered by that same Subscriber, or other Subscribers participating in the same Hosted Pool. ~~The setup of a hosted pool is at the ATS's discretion, and the ATS will determine whether or not to offer Hosted Pool functionality on a Subscriber by Subscriber basis, with the ATS making its determination based on current and expected order flow volume.~~ Hosted Pools are described in more detail in Part III, Items 7 and 9.

~~Each individual Hosted Pool participation is limited to the Subscriber on behalf of whom the Hosted Pool was set up and those Subscribers that were invited by the Subscriber setting up the pool to participate in such Hosted Pool.~~

Unless otherwise stated, the ATS' matching and trading rules ~~in~~ applies to the Hosted ~~Pool are~~ Pools in the same manner as ~~in~~ the ATS.

Subscribers participating in a Hosted Pool may request that orders designated for the Midpoint book and the ASPEN book have the ability to interact with each other inside the Hosted Pool. When such an option is selected, any eligible orders will interact at each Match Event, regardless if the next Match Event is for Midpoint book-eligible orders or ASPEN book-eligible orders. The Block IOI service offered in the Hosted Pool is available for the Midpoint book only.

~~Subscribers may designate an order to interact within a Hosted Pool, as well as to interact with the liquidity outside the Hosted Pool after checking for liquidity in the Hosted Pool. In particular, at each Match Event, the matching engine will, in sequential order, (1) match orders eligible to be matched in Hosted Pools, and then (2) match orders outside the Hosted Pool, including orders designated to interact first in a Hosted Pool and then outside a Hosted Pool.~~

~~The ATS's Hosted Pools accept "Conditional Orders" and permit the publication of IOIs, as well as VWAP Orders. Conditional Orders and VWAP Orders are not accepted outside of the ATS's Hosted Pools. IOIs are only published to other participants of the same Hosted Pool. See Part III, Item 9 for a discussion of Conditional Orders and IOIs and Part III, Item 7 for a discussion of VWAP Orders.~~

- 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 ☐ 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.

Anti-Internalization

The ATS provides an "anti-internalization" setting to its Subscribers. This setting can be enabled upon client request and will prevent the self-matching of two orders from the same Subscriber on the ATS's order books. This setting will not be enabled by default, but can be enabled upon Subscriber request and will be enforced by the Client ID setting. Subscribers can either contact IntelligentCross Trading Operations to enable this functionality on an MPID basis or they can configure the trading systems to prevent self-crossing at a client or trading desk level.

Hosted Pool

The ATS may setup a Hosted Pool, at the request of a Subscriber, where such Subscriber will designate that an order interact with other orders entered by that same Subscriber, or other Subscribers participating in the same Hosted Pool. The setup of a hosted pool is at the ATS's discretion, and the ATS will determine whether or not to offer Hosted Pool functionality on a Subscriber-by-Subscriber basis, with the ATS making its determination based on current and expected order flow volume.

Each individual Hosted Pool participation is limited to the Subscriber on behalf of whom the Hosted Pool was set up and those Subscribers that were invited by the Subscriber setting up the pool to participate in such Hosted Pool.

Unless otherwise indicated, the matching and trading rules in a Hosted Pool are the same as in the ATS. Subscribers participating in a Hosted Pool may request that orders designated for the Midpoint book and orders designated for the ASPEN book have the ability to interact with each other in the Hosted Pool. When such an option is selected, any eligible orders will interact at each Match Event, regardless if the next Match Event is for Midpoint book-eligible orders or ASPEN-eligible orders.

As discussed in Part III, Item 9, the ATS offers a Block IOI service in a Hosted Pool, the purpose of which is to inform Sponsored Firms of contra liquidity in a designated Hosted Pool and to allow Sponsored Firms to send firm orders directly to a designated Hosted Pool via a sponsored access FIX session of a Sponsor. The Block IOI service is only available to those Sponsored Firms of a Sponsor; Sponsors will be required to create lists of approved Sponsored Firms. Sponsors can determine which Sponsored Firms on its list can participate in the Block IOI service on a symbol-by-symbol basis and may offer different terms to different Sponsored Firms, even within the same symbol.

- 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.

With respect to Hosted Pools, the ATS will determine whether or not to offer Hosted Pool functionality on a Subscriber-by-Subscriber basis, with the ATS making its determination based on current and expected order flow volume. Notwithstanding the foregoing, the procedures for trading in a Hosted Pool are the same for all Subscribers.

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.

For ASPEN, the ATS offers the IQX Data Feed, which displays orders eligible to be displayed in real-time to IQX Data Feed Recipients. Subscribers, in their discretion, may submit Limit Orders and Primary Peg Orders as displayed orders. Displayed orders from all three ASPEN books are available in the IQX Data Feed. Each of the ASPEN books have individualized data feeds; as such, subscribers to the IQX Data Feed can choose to consume data from whichever books they choose through separate feed identifiers.

The ATS will not display Limit Orders and Primary Peg Orders that lock or cross contra-side interest that is displayed (1) inside the ATS or (2) as part of the NBBO as determined by the SIP and/or SRO proprietary data feeds. Instead, if a displayed Limit Order or Primary Peg Order would lock or cross displayed contra-side interest inside the ATS or as part of the NBBO, such order will be displayed one minimum price variation less aggressive than the price of displayed contra-side interest inside the ATS or as part of the NBBO and ranked at the price of displayed contra-side interest inside the ATS or as part of the NBBO. In the event the displayed contra-side interest inside the ATS or the NBBO updates, such order's displayed price will be updated to the most aggressive price permissible without locking displayed contra-side interest inside the ATS or the NBBO, up to the order's limit price, and such order's ranked price will be updated to the most aggressive price permissible without crossing displayed contra-side interest inside the ATS or the NBBO,

For all displayed orders, the ATS disseminates all eligible bids and offers along with the size available (full depth of book) in the IQX Data Feed as part of ASPEN. The IQX Data Feed also disseminates all executions that occur in ASPEN – displayed and non-displayed - in real-time. The execution information includes the price and number of shares executed.

Orders designated by a Subscriber to interact with other orders in a Hosted Pool are not eligible to be displayed orders. Executions occurring in a Hosted Pool are not disseminated in the IQX Data Feed.

The ATS's ATS' Hosted Pools accept "Conditional Orders." Conditional Orders are not accepted outside of the ATS' Hosted Pools. Conditional Orders are not visible to Hosted Pool participants.

The ATS' Hosted Pools also permit the publication of indications of interest ("IOIs"), which allow participants of a Hosted Pool to send IOIs to any other participant of that Hosted Pool. IOIs contain symbol, side and size. Participants in Hosted Pools can

elect to generate IOIs and IOIs would be made visible to other Hosted Pool participants.

The ATS also accepts VWAP Orders only in the Hosted Pools. VWAP Order invites include match quantity and match time.

The ATS also offers a Block IOI service in its Hosted Pools, the purpose of which is to inform Sponsored Firms of contra liquidity in a designated Hosted Pool and to allow Sponsored Firms to send firm orders directly to a designated Hosted Pool via a sponsored access FIX session of a Sponsor. Participants with firm or conditional orders in the Hosted Pool are not informed if there is a possible match (e.g., if the IOI matches with a conditional order in the Hosted Pool, no invite is sent for that conditional order); only the sender of the IOI is informed. In addition, Block IOIs, which are generated by the Sponsored Firm, are not visible to any participant in Hosted Pools, in contrast to IOIs which participants in Hosted Pools can elect to generate and be made visible to other Hosted Pool participants.

Orders may be sent to the ATS through the SOR, and thus, the SOR is aware of a Subscriber's order information being sent to the ATS (symbol, size, side, price). The SOR accesses the IQX Data Feed on the same terms as any other recipient of the IQX Data Feed. The DMA provider has knowledge of the Subscriber's order information (symbol, size, side, price) being sent by the SOR through the DMA provider to access the ATS. The DMA is prohibited from sharing such information outside of its organization.

- 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).

Answer: For the Midpoint book and the ASPEN Fee/Fee book, the Base Rate charged by IntelligentCross is .0008 per share for each side of a transaction.

The Base Rate for ASPEN Maker/Taker is (.0028) rebate per share for Subscribers that provide liquidity and .0030 per share fee for Subscribers that remove liquidity.

The Base Rate for ASPEN Taker/Maker is (.0016) rebate per share for Subscribers that remove liquidity and .0020 per share fee for Subscribers that provide liquidity.

The ATS does not have a standard fee schedule associated with the Hosted Pool. Orders executed in a Hosted Pool are charged fees in a range from (.0015) rebate per share to .0020 fee per share. The fees associated with the Hosted Pool are negotiated fees, and may be re-evaluated from time to time. Factors considered when negotiating fees may include but are not limited to historical trading volume and patterns, anticipated trading volume and patterns, and the characteristics of the orders (for example, whether the orders are retail or institutional in nature, or whether the Hosted Pool participants are liquidity takers or liquidity providers). The fees for the Block IOI service will be the same as the Hosted Pool fees. Fees are charged to Subscribers only and fees are not directly billed to Sponsored Firms.

The other fees incurred by Subscribers of the ATS are SRO fees and fees charged by our clearing provider, Instinet.

The ATS passes through certain regulatory fees (including FINRA's Section 3 fee and Trading Activity Fee ("TAF") for Subscribers who are not FINRA members), and fees billed to the ATS for Subscribers through third-party providers for accessing market data.

- 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.

Answer: N/A

- 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.

Answer: With respect to trading in the Midpoint book and the ASPEN Fee/Fee book, there are two ways existing ATS Subscribers can pay lower fees, ("Subscriber Fee Discount"), as described below:

1. Total Composite Volume (TCV) Incentive*--if average daily participation of TCV is:

<u>TCV %</u>	<u>Commission rate per share traded</u>
=> 12 bps of TCV	2 mils per share
=> 10 bps of TCV	3 mils per share
=> 8 bps of TCV	4 mils per share
=> 4 bps of TCV	6 mils per share
=> Base Rate	8 mils per share

***Criteria**

- The Base Rate is the same for all Subscribers.
- Any Subscriber Fee Discount Rate will be calculated retroactively on all shares traded for that calendar month.
- TCV is the total market volume in all NMS Stocks reported to the Consolidated Tape.

2. Active Order Incentive**

Live in 200 to 500 unique symbols at a time (on average) 6 mils per share

Live in 501 to 1000 unique symbols at a time (on average) 4 mils per share

Live in 1001 to 2000 unique symbols at a time (on average) 3 mils per share

Live in over 2001 unique symbols at a time (on average) 2 mils per share

****Criteria**

- Orders must be marketable: (1) priced at or more aggressive than the NBBO midpoint for the Midpoint book and (2) priced at or more aggressive than the NBBO for the ASPEN Fee/Fee book.

- IntelligentCross will monitor open orders every few minutes to calculate the average unique symbols in the book on a daily basis.
- If minimum quantity ("MinQty") present, must be less than or equal to 100 shares.
- Not be an IOC Order.
- Rate will be calculated retroactively on all shares traded for that calendar month.
- If a Subscriber is live for a symbol in both Midpoint and ASPEN Fee/Fee, it will count twice for purposes of qualifying for the Active Order Incentive.

Trading in ASPEN Maker/Taker, ASPEN Taker/Maker and Hosted Pools will not be taken into account for purposes of qualifying for the Subscriber Fee Discount. If a Subscriber qualifies for a Subscriber Fee Discount, the pricing will apply to their trading activity in both the Midpoint book and ASPEN Fee/Fee book. The ATS can offer the Subscriber Fee Discount to allow new Subscribers to receive the Subscriber Fee Discount and pay the lowest fee charged to any existing Subscriber based on the above criteria.