

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.

DEFINITION OF CTI AND CITI-ONE INFRASTRUCTURE

CGMI maintains policies and standards designed to limit sharing of Citi's and Citi's clients' confidential information with only those who have a need to know such information in order to perform their job functions. These policies and standards also apply to CGMI personnel and shared personnel involved in the operation of Citi-ONE or responsible for the ATS's compliance with applicable laws.

As noted in Part II, Item 6, any information regarding a Participant's identity, orders, trading interest or intentions, positions, risk exposure or trading strategy, or similar non-public transactional information related to that Participant is considered CTI. CGMI does not consider post-trade information that is aggregated and anonymized, or otherwise presented in a way that does not reveal a client to be a Subscriber to Citi-ONE, including the example described above in Part II, Item 6, to be CTI.

The Citi-ONE matching engines and gateway ("Citi-ONE infrastructure") are hosted and operated by Ocean, as described in Part II, Item 6. This Citi-ONE infrastructure resides in an Ocean cage within the Equinix NY4 datacenter and is physically separated from other CGMI systems (including the CGMI algos and SOR) and operated on hardware separate from other systems hosted and operated by Ocean. Citi-ONE infrastructure also is separate from that of the Nasdaq exchanges. All Citi-ONE orders pass through the Citi-ONE gateway as the access point to the Citi-ONE ATS.

CGMI utilizes the standard Exegy Ticker Plant (XTP) market data solution, which processes Firm Regular Session Order information from Ocean for inclusion in the feeds to the CGMI algos and SOR as described in Part III, Item 15. The XTP is hosted by CGMI, on CGMI leased premises, in a third-party data center and is controlled and secured by Citi firewalls.

Access to Citi-ONE CTI is limited to Citi personnel who have a need to know in order to support the operation and compliance of the ATS. Employees of CGMI and its Affiliates support the operation of the Citi-ONE ATS and other businesses (shared employees), as described in Part II,

Item 6. These shared employees as well as certain CGMI applications have access to Citi-ONE CTI.

Also, Ocean employees responsible for the daily operation of Citi-ONE have access to Citi-ONE CTI in the form of Citi-ONE intraday and historical order and matching information. These Ocean employees reside in a separate physical location from CGMI shared employees.

Separately, certain Exegy employees have access to Citi-ONE CTI as it is processed in the XTP as well as when providing Citi-ONE-related services. See Part III, Item 15 for additional information about services provided by Exegy.

Set forth below are the written standards and oversight procedures to safeguard Citi-ONE CTI.

CGMI POLICIES AND STANDARDS

The following CGMI policies and standards, as well as the CGMI access and information barriers, apply to the Citi personnel identified in Part II, Item 7(d), except to the extent the description of a particular control or safeguard reflects a more limited application (e.g., the Mandatory Absence policy).

PERSONAL TRADING: Citi employees, including those with access to Citi-ONE CTI, are subject to Citi policies, which apply to CGMI, that prohibit personal trading based on non-public or other confidential information. Citi's Personal Trading and Investment Policy defines permitted and prohibited trading and provides rules for the maintenance and review of internal and external brokerage activities of Citi employees who are involved in the purchase and sale of investment products as well as certain senior officers of Citi (together with their other covered household members, "Covered Persons"). The ATS Supervisor (and approved Series 24 Delegate) and Citi-ONE shared employees are subject to Citi's Personal Trading and Investment Policy.

Covered Persons may only trade securities in Firm-approved outside brokerage accounts, and they are not allowed to use any Citi-ONE CTI for personal trading. Covered Persons' personal investment positions are subject to a 30-day holding period. Covered Persons are generally restricted from trading New Issues and engaging in certain trading strategies involving Citi securities.

Covered Persons must enter a pre-approval request for every purchase and sale of a security executed in an employee investment account. The Compliance Department reviews these requests. Covered Persons that are responsible for the operation of Citi-ONE and certain others must also obtain the approval of their direct manager prior to a transaction. The investment activities of Covered Persons, including Citi preclearance requirements and the disclosure and surveillance of personal brokerage or trading accounts are monitored by each Covered Person's direct manager.

Prior to approving or rejecting any personal trading request, each Covered Person's direct manager (or the Compliance Department, as the case may be) considers various factors that touch upon how closely related the proposed trade is to the Covered Person's daily business activities. The approver considers whether the proposed transaction potentially raises a conflict of interest or is otherwise not in the best interests of Citi.

On a post-trade basis, CGMI direct managers use the Compliance for You (CoFY) system to review Covered Persons' personal trading activities. Accounts that do not permit trading in individual securities, derivatives, futures, or commodities (e.g., cryptocurrency accounts, mutual funds, unit investment trusts) are not subject to this review. During the review of employee trading activity, managers of the employee look for pre-approvals, indications of improper trading activity that might interfere with such person's job responsibilities, and excessive trading. CGMI's Employee Trading Surveillance Team also monitors activity in employee personal trading accounts.

On an annual basis, Covered Persons must confirm through the CoFY platform that the information about their reportable accounts on record is accurate, as well as certify that they understand and will abide by Citi's Personal Trading and Investment Policy.

Pursuant to CGMI's written supervisory procedures and a plan of supervision, the ATS Supervisor (or approved Series 24 Delegate) conducts a monthly review to ensure that the managers of the ATS's shared employees are conducting their reviews of employee personal trading in a timely manner.

FIRM-WIDE CONFIDENTIAL INFORMATION RESTRICTIONS: As a general matter, Citi employees are required to read and comply with the Citi Code of Conduct, Citi Privacy and Confidentiality Policy and Citi Electronic Communications Policy, which include provisions that address safeguarding sensitive information. On a semi-annual basis, the Citi-ONE ATS Supervisor (or approved Series 24 Delegate) attests that shared employees have completed assigned annual compliance training which covers safeguarding CTI.

CYBER RISK: Citi has adopted and implemented an intelligence-led strategy to establish, implement, review, and adjust its approach to managing cyber risks. The strategy is supported by corresponding information security programs, policies and procedures, governance and management structures, reporting, and metrics. This strategy is applicable to Citi-ONE.

MANDATORY ABSENCE: Pursuant to the Citi Mandatory Absence Policy, employees who have the authority to execute transactions on behalf of CGMI and its Clients, or authority to make entries in Citi's books and records, as well as employees who can authorize, approve, or otherwise directly cause such transactions, are subject to a mandatory absence. As a compliance control, the policy requires such employees be absent from sensitive positions for a prescribed period of time so that their activities may be performed by others.

CGMI ACCESS AND INFORMATION BARRIERS

In addition to the above-referenced policies, Citi has information barriers to separate personnel and systems with access to ATS CTI from those not permitted to access such information. Citi also relies on information barriers to distinguish among personnel and systems permissioned to access different types of Citi-ONE CTI. Citi also restricts access to Citi applications containing Citi-ONE CTI through an Enterprise Entitlement Review System (EERS) and an ATS-specific review and approval process. Direct managers log and manage access using EERS.

Shared employees seeking access to Citi-ONE CTI are required to obtain approval from their direct manager, the Citi-ONE application (technology) manager, and the primary business information owner (the ATS Supervisor or approved Series 24 Delegate). The ATS Supervisor (or approved Series 24 Delegate) oversees access to Citi-ONE CTI by shared employees who are managed by persons other than the ATS Supervisor (or approved Series 24 Delegate). Any shared employees seeking access to Citi-ONE CTI must submit a request through Citi's Marketplace ("CMP") and such request for access is considered based on the role of the requestor. Direct managers are responsible for reviewing the request for access to Citi-ONE CTI prior to providing approval. In considering such requests, direct managers consider factors including the employee's current role and whether the employee performs a function related to Citi-ONE. An employee's access request will be denied if the employee's role does not require such access in order to operate Citi-ONE or support Citi-ONE compliance efforts. Subsequent to initial approval of a request for access, semi-annual reviews of such access are managed and captured in EERS.

The ATS Supervisor (or approved Series 24 Delegate) conducts monthly reviews related to shared employees who have real-time access to Citi-ONE. The ATS Supervisor (or approved Series 24 Delegate) also conducts quarterly reviews with respect to persons with access to Citi-ONE information/CTI on a T+1 basis. On a semi-annual basis, the ATS Supervisor (or approved Series 24 Delegate) conducts reviews of those shared employees within a direct manager's reporting line. Specifically, the ATS Supervisor (or approved Series 24 Delegate) conducts a review to confirm that direct managers of Citi-ONE shared employees are performing timely access and entitlements reviews of the shared employees reporting to them, and that these shared employees only have access to ATS-related applications that are appropriate and necessary for their roles with respect to supporting the operation and compliance of the ATS. Access to Citi-ONE data is removed with respect to any employee previously classified as a shared employee of Citi-ONE whose role has changed and, as a result, no longer requires access to Citi-ONE data.

Citi-ONE's plan of supervision and written procedures also require a monthly governance meeting of a group consisting of the ATS Supervisor (and approved Series 24 Delegate), Legal, Compliance, and Operations personnel. During this Citi-ONE governance meeting, amongst a variety of ATS-related topics, the group reviews additions and subtractions to the list of shared

employees with access to intraday and historical order and matching information and the appropriateness of shared employees' access to Citi-ONE data.

The Exegy data feeds (the anonymized, aggregated information about Citi-ONE FRS Orders, as described in Part III, Item 15) that are used by CGMI algos and the SOR are considered Citi-ONE CTI. Access to this Citi-ONE CTI contained in the data feeds is confined to the CGMI algos and the SOR in the following ways: First, access to the Exegy data feeds containing Citi-ONE information is via physical cable, which allows CGMI to limit access to the data feeds. Only the CGMI algos and the SOR have this physical connection to the Exegy data feeds--they are not physically connected to any other CGMI infrastructure. Second, once connected, the CGMI algo and SOR are still required to provide login credentials to Exegy in order to receive the data. Third, the programmed use of the Citi-ONE data feeds by the CGMI algos and the SOR (i.e., to make efficient real-time decisions regarding whether and when to route orders to Citi-ONE, and the size and price conditions of orders sent to Citi-ONE) was subject to appropriate development and testing. The CGMI algos and SOR are not programmed to use the Citi-ONE data feeds for any other purposes, such as when performing risk checks or undergoing transaction cost analysis.

THIRD-PARTY ACCESS AND INFORMATION BARRIERS

Ocean and Nasdaq employees with access to Citi-ONE CTI include Ocean and Nasdaq staff from Compliance, Operations, Technology Development (including trading and surrounding systems), Product Management, and Business Management (collectively, "Ocean employees"). These persons have access to Citi-ONE CTI consisting of individual orders and matches, client identifiers of Participants, and volume of orders pertaining to Citi-ONE.

Ocean's policies and procedures employ a three-pronged approach to permission access to Citi-ONE. First, an employee must complete compliance training specific to the Ocean business unit responsible for Ocean's Citi-ONE activities. Second, an Ocean employee must request, and Ocean Compliance must approve, access to each specific Ocean system based on the employee's designated role and responsibilities. Third, once approved, the Ocean employee must complete Ocean's annual compliance training. Ocean employees with access to Citi-ONE CTI are subject to Ocean's Information Barriers and Conflict Management Policies and Procedures. Pursuant to these procedures, Ocean employees are prohibited from sharing Citi-ONE CTI with other employees (including at Nasdaq) who are not expressly authorized to receive such information.

All Ocean employees are subject to Nasdaq's Global Trading Policy ("GTP"), which outlines all requirements and restrictions related to personal trading activity including holding periods, annual attestations, IPO restrictions, and a prohibited list. Ocean employees are required to disclose personal investment and brokerage accounts, positions, and transactions to Nasdaq. Nasdaq's Global Ethics Team monitors personal trading activities against the GTP.

Ocean also conducts electronic communications reviews to identify policy violations including noncompliance with the above-referenced policies and procedures.

CGMI has the right to audit Ocean's operation of Citi-ONE, including Ocean's access to and use of Citi-ONE CTI either through audits conducted by CGMI's own audit team or by third-party auditors. Such audits may be conducted on-site or off-site.

Ocean also is obligated to notify CGMI of any actual or suspected unauthorized access to confidential information, which includes Citi-ONE CTI, in a timely manner.

Ocean outsources Consolidated Audit Trail submission responsibilities on behalf of Citi-ONE to S3. Accordingly, certain S3 employees have access to Citi-ONE CTI. Such access is limited to S3 employees who require it to complete S3's contractual work for Ocean on behalf of Citi-ONE. Such access approval is granted by S3 consistent with S3's policies and procedures regarding information security and data confidentiality. S3 personnel with access to Citi-ONE CTI must complete training and sign an acknowledgment regarding handling of confidential information. S3 conducts audits each quarter to confirm that only authorized S3 employees have been granted access and that access is used only as required to complete Citi-ONE-related services. The results of audits are documented and a written attestation is provided to the Citi-ONE ATS Supervisor (or approved Series 24 Delegate). S3 also is obligated to notify CGMI of any actual or suspected unauthorized access to confidential information, which includes Citi-ONE CTI, in a timely manner.

Exegy employees can gain access to the Citi-ONE CTI only with proper Exegy approvals. Approval is only granted to Exegy employees who require such access to complete Exegy's contractual work for CGMI, such as monitoring, maintaining, and incident troubleshooting with respect to the data provided by Exegy to CGMI. Such access approval is granted by Exegy senior management, and a record of approval is automatically and securely maintained for future audit purposes. Exegy conducts audits each quarter to confirm that only authorized Exegy employees have been granted access and that access is used only as required to complete Citi-ONE-related services. The results of audits are documented and a written attestation is provided to the Citi-ONE ATS Supervisor (or approved Series 24 Delegate). If remedial actions are required, they are taken within 24 hours and the audit results are updated and applicable records are maintained. All violations of the Exegy policy are reported to senior Exegy executive management and the employee(s) are subject to discipline, including potential termination.

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.

If a Subscriber requests and instructs the Broker-Dealer Operator to provide its CTI to a third-party provider that the Subscriber identifies (for example, to provide a third-party clearing firm with a drop copy of that Subscriber's executions in Citi-ONE), the Broker-Dealer Operator will comply with that request. Subscribers can make this type of request via onboarding paperwork and/or by contacting Platform Sales.

In addition, as described below in Part II, Item 7(d), Direct Subscribers can opt into having their aggregated historical order information provided to the subset of Platform Sales personnel within CGMI that provide ATS-related sales services to Direct Subscribers.

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.

Subscribers can withdraw consent to the disclosure of their CTI described in response to Part II, Item 7(b) by (i) amending the instructions provided to the Broker-Dealer Operator with respect to CTI provided to third-party providers by contacting Platform Sales; or (ii) contacting Platform Sales with respect to CTI shared with certain Platform Sales personnel.

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.

Access to Citi-ONE CTI is limited to the specific members of groups of shared employees within CGMI, or a CGMI Affiliate (Citibank N.A., Citi Technology Inc., Citigroup Global Markets Limited, and Citi Canada Technology Services ULC) who support various functions pertaining to operations and compliance of the ATS and who are approved to access Citi-ONE CTI as described in Part II, Item 7(a). CGMI's algos and SOR also have access to certain Citi-ONE CTI as described herein. In addition, access to Citi-ONE CTI is available to a limited group of employees of third-party suppliers that provide services to the Citi-ONE ATS related to the operations and compliance of the ATS, including surveillance, and business and product management. For employees of third-party suppliers, access is limited by their employer rules and procedures, restricting access to those Persons that have a need to know, as referenced in Part II, Item 7.

CITI PERSONNEL

Certain members of the following groups are shared employees with access to Citi-ONE CTI. These personnel are subject to the CGMI policies and standards describe in response to Part II,

Item 7(a), except to the extent Item 7(a) describes a more limited scope for a particular control or safeguard.

Transaction Support and Operations personnel within Citibank N.A., Citi Technology Inc., and CGMI are responsible for performing transaction-related production and operational support, gathering necessary documentation pertaining to Indirect Subscribers, providing implementation services for Indirect Subscribers, monitoring and troubleshooting data feed connections, providing oversight of regulatory reporting and trade confirmation processes, introducing and updating risk limits, as well as performing middle and back office functions. The Citi-ONE CTI that such personnel have access to is intraday and historical (i.e., end of day or T+1) order and matching information.

The ATS Supervisor (including an approved Series 24 Delegate/Manager) is a CGMI employee responsible for providing transaction-related and operational support, reviewing and approving internal and external documentation and providing oversight, governance, and supervision of the Citi-ONE ATS. This includes facilitating Subscriber requests to provide or cease providing CTI to a third-party provider (e.g., clearing firm), as described above in Part II, Items 7(b) and (c) after the relevant information is gathered during onboarding and/or by Platform Sales. The Citi-ONE CTI that the ATS Supervisor (including an approved Series 24 Delegate) has access to is intraday and historical order and matching information, including the results of the Mark-out Analysis described in Part III, Item 13, as needed to carry out those ATS responsibilities.

Product, Electronic Trading and Surveillance Compliance personnel within Citibank N.A. and CGMI are responsible for, among other responsibilities, providing compliance-related guidance and oversight of Citi-ONE's operation, responding to regulatory inquiries and exams, and reviewing daily trade surveillance reports pertaining to Citi-ONE activity. The Citi-ONE CTI that such personnel have access to is intraday and historical order and matching information, including the results of the Mark-out Analysis described in Part III, Item 13.

Equity Risk & Controls (ERC) personnel within CGMI oversee supervisory reviews and attestations completed by the ATS Supervisor (or approved Series 24 Delegate). ERC personnel also collaborate with Surveillance personnel on periodic reviews for potential manipulative trading and other conduct issues and conduct oversight and documentation of Market Access Rule limits. ERC also oversees regulatory reporting. The Citi-ONE CTI that such personnel have access to is historical order and matching information.

Technology personnel within Citibank N.A. and Citi Canada Technology Services ULC are responsible for performing independent testing, execution quality analyses, and implementation of mark-out analyses, and are responsible for CGMI's algo and SOR-related applications and/or connectivity used by Indirect Subscribers. They also apply segmentation logic and are responsible for the integration and maintenance of inputs and outputs across supporting downstream CGMI internal systems. They perform oversight of CAT reporting and provide

business personnel with data. They also perform quality checks of the data used for compliance, surveillance, and monitoring purposes. The Citi-ONE CTI that Technology personnel who are responsible for CGMI's algo and SOR-related applications and/or connectivity used by Indirect Subscribers have access to is the identity of Indirect Subscribers. The Citi-ONE CTI that other Technology personnel have access to is historical order and matching information, including the results of the Mark-out Analysis described in Part III, Item 13.

A small subset of Markets Quantitative Analysts (MQA) within CGMI are responsible for the design of the mark-out methodology described in Part III, Item 13. In furtherance of this responsibility, the Citi-ONE CTI that a subset of MQA personnel will have access to is historical order and matching information, including the results of the Mark-out Analysis described in Part III, Item 13.

Equities Management within CGMI is responsible for managing the overall equities business and may assist the ATS Supervisor (or approved Series 24 Delegate) with general business matters as part of their role in overseeing CGMI's equities business. Such Equities Management personnel receive aggregated historical Citi-ONE data in order to understand the scope and scale of Citi-ONE as one of CGMI's equity execution service offerings, and in furtherance of their responsibilities to oversee CGMI's equities business. Equities Management is not involved in day-to-day operations of Citi-ONE, however issues requiring escalation, including potential technology-related execution errors, may be directed to these personnel and they may have access on an as needed basis to limited Citi-ONE CTI in the form of intraday and/or historical order and matching information to assist with review and resolution of such escalations. Personnel within Equities Management also have as-needed access to the results of the Mark-out Analysis described in Part III, Item 13.

Client Coverage personnel within CGMI, made up of Cash Sales Trading, Electronic Execution Coverage, and Execution Advisory Services employees, provide client coverage and support services. The Citi-ONE CTI that Cash Sales Trading personnel have access to is the intraday and historical order and matching information of the individual Indirect Subscribers to whom they provide coverage. The Citi-ONE CTI that Electronic Execution Coverage and Execution Advisory Services personnel have access to is intraday and historical order and matching information for the Indirect Subscribers whose orders are entered into CGMI systems. The bases for such access are that each Electronic Execution Coverage representative can provide support services to any Indirect Subscriber and Execution Advisory Services personnel require access in furtherance of their role in optimizing liquidity sourcing for clients, including as described in Part III, Item 9, with respect to FRS Order and Conditional Order interaction.

A subset of Platform Sales personnel within CGMI provide ATS-related sales services to Direct Subscribers. In furtherance of their sales responsibilities, the Citi-ONE CTI that such personnel have access to in the normal course of business is the identity of Direct Subscribers and the aggregated historical matching information for each Direct Subscriber. Direct Subscribers can

also opt into having their aggregated order information provided to these personnel by contacting Platform Sales. In addition, on an ad hoc and as needed basis, these personnel may have access to intraday and/or historical order and matching information for all Direct Subscribers, including the results of the Mark-out Analysis described in Part III, Item 13, to assist with review and resolution of client queries.

Credit Risk and In-Business Risk personnel within Citibank N.A. and CGMI advise on the financial risk management controls applicable to Subscribers pursuant to Securities and Exchange Commission Rule 15c3-5. The Citi-ONE CTI to which these personnel have access is the identity of Subscribers.

Product Legal, Risk Management including Conduct Risk, Business Management and Internal Audit personnel within Citibank N.A., Citigroup Global Markets Limited, and CGMI provide control functions and oversight of Citi-ONE and have access as needed to Citi-ONE CTI in the form of historical order and matching information. These employees assist CGMI with tasks including but not limited to responding to regulatory inquiries or performing internal audits of the electronic trading platform, which could include Citi-ONE.

CGMI ALGOS AND SOR

CGMI algos and the CGMI SOR are able to create child orders based on parent level orders sent to the CGMI algos or CGMI SOR. The decision to route an order to Citi-ONE (or other trading centers) may be made by CGMI algos or the SOR. If the CGMI algos decide to send an order to Citi-ONE, the CGMI algos send a directed order to the SOR, and the SOR routes the order to Citi-ONE. CGMI's algos may also send non-directed orders to the SOR, which may decide to send orders to Citi-ONE. The CGMI algos do not enter orders directly into Citi-ONE. The CGMI algos and SOR receive Citi-ONE CTI in the form of data feeds containing aggregated buy and sell information regarding Citi-ONE Firm Regular Session Orders (see Part III, Item 7 for the definition of Firm Regular Session Orders) from Exegy. The CGMI algos and SOR use the data feeds solely to make efficient real-time decisions regarding whether and when to route orders to Citi-ONE, and the size and price conditions of orders sent to Citi-ONE. See Part III, Item 15.

OCEAN EMPLOYEES (a Third-Party Technology Supplier)

Access to Citi-ONE CTI is available to limited groups of Ocean employees that support various functions pertaining to hosting, operations, and the compliance of the ATS. Designated Ocean employees have access to intraday and historical Citi-ONE order and matching information in order to perform and manage various day-to-day troubleshooting, incident management and market operations tasks, software development, quality assurance, and maintenance activities. Such access also is required by Ocean in connection with conducting surveillance activities and managing Ocean's access entitlements for Citi-ONE.

Ocean Operations employees are responsible for troubleshooting various day-to-day technical and market-related operations pertaining to Citi-ONE. They also assist with establishing ports and verifying IP addresses and FIX connections for Direct Subscribers. The Citi-ONE CTI that these personnel have access to is Direct Subscriber identity and intraday and historical order and matching information.

Ocean Compliance employees are responsible for building ATS surveillance alerts and patterns chosen by CGMI, providing surveillance of the Citi-ONE ATS through the Nasdaq Market Surveillance application, and troubleshooting and incident management. The Citi-ONE CTI that these personnel have access to is intraday and historical order and matching information. In addition, Ocean Compliance is responsible for managing requests for access and entitlements from within the NASDAQ organization and for overseeing Ocean's Information Barriers and Conflict Management policies and procedures.

One Ocean Technology group is responsible for application development and maintenance of the core matching technology of Citi-ONE. Other technology-focused groups within Ocean are responsible for various downstream Ocean applications that surround and support the Citi-ONE core technology with products, services, and data including regulatory reporting, surveillance, and data storage. A group of Ocean employees is responsible for written documentation, design modules, and functionality pertaining to CGMI's requirements. This group is responsible for the coordination and management of workflows across multiple Ocean groups. Collectively, the Citi-ONE CTI that these Technology groups have access to is intraday and historical order and matching information.

S3 PERSONNEL (an Ocean contractor)

Certain S3 employees have access to Citi-ONE CTI necessary for submission of CAT reporting on behalf of CGMI. These personnel have access to Subscriber identity and intraday and historical order and matching information.

EXEGY PERSONNEL (a Third-Party Technology Supplier)

Certain Exegy employees have access to Citi-ONE CTI necessary to (i) monitor the XTP stability, troubleshooting, and connectivity (Level 1), and (ii) respond to queries, and investigate and resolve incidents (Level 2 and Level 3). These personnel have access to anonymized and aggregated intraday order information for Firm Regular Session Orders (order class defined in Part III, Items 4 and 7) within the NBBO, as described further in Part III, Item 15.

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.

i. Citi-ONE has three (3) main classes of orders (each an "Order Class"): Firm Regular Session ("FRS") Orders; Conditional Orders ("COs"), which include associated Firm-up Orders; and Market on Close ("MOC") Orders.

FRS Orders are auto-executable orders. FRS Orders are prioritized for matching by Order Class | Price | Broker | Inclusion Level | Time. See Part III, Item 11. Prioritization by Order Class means that FRS Orders will seek to interact with other FRS Orders before COs, to the extent they are

configured to interact with COs, as described further in the next paragraph. FRS Orders do not interact with MOC Orders.

COs are messages indicating trading interest and are not subject to auto-execution. COs are prioritized by Order Class | Price | Broker | Time. Prioritization by Order Class means that COs will seek to interact with other COs before interacting with FRS Orders that have been configured on an order level to interact with COs ("Eligible FRS Orders"). COs will not interact with FRS Orders that have not been configured to interact with COs. Additional detail about handling of COs is included in Part III, Item 9 and Item 11. COs do not interact with MOC Orders.

Upon a Firm-up Request being triggered as a result of a potential match between an Eligible FRS Order and a CO, each order will be "reserved" for no longer than the period of time (500ms) that the Participant representing the CO has to respond to a Firm-up Request (the "Firm-up Period"). If the CO responds with a Firm-up Order within the Firm-up Period, the orders will be matched for the lesser quantity of the Eligible FRS Order quantity or the Firm-up Order. However, if at the time the Firm-up Order arrives, there is one or more higher-ranked FRS Order(s) on the same side of the market as the Eligible FRS Order that initiated the Firm-up Request with the initial CO, the Firm-up Order will first interact with the higher-ranked FRS Order(s) and any remaining quantity may interact with the initial Eligible FRS Order. Such higher-ranked FRS Order(s) may not have interacted with the CO initially because (i) it was not an Eligible FRS Order or (ii) it arrived or was reprioritized after the Firm-up Period started. As further described in Part III, Item 9, the unmatched quantity of a Firm-up Order will be cancelled and the unmatched quantity of an Eligible FRS Order will remain on the order book.

MOC Orders from Participants who have opted in to or been enabled for the MOCS are orders designated to participate in the MOCS on Citi-ONE. MOC Orders are prioritized by Broker | Size. MOC Orders do not interact with FRS Orders or COs. MOC Orders will only match with other MOC Orders at 3:45 PM ET and any unmatched MOC Orders will be cancelled back to Participants. MOC Orders matched on Citi-ONE subsequently will be priced as determined by the primary listing exchange for the NMS Stock. Additional detail about handling of MOC Orders is included in Part III, Item 11 and Item 17.

The symbol, participant, side, order class, and peg condition attributes of an existing order in Citi-ONE cannot be updated. Updates to any of the following order attributes will generate a new timestamp (timestamp precision is discussed in Part III, Item 11), and therefore, could cause an order to lose matching priority - price (including the limit price assigned to an order with a peg condition), minimum executable quantity, maximum quantity, time in force ("TIF"), an increase in quantity, or change in post-only instruction (either adding or removing the instruction).

ii. The price conditions that may be applied to FRS Orders and COs are: (i) limit or (ii) peg condition (primary, midpoint, or market peg) with a limit. An order with a peg condition must

have a limit applied. MOC Orders may only be submitted as market orders with a TIF of "at the close" and will be priced as determined by the primary listing exchange for the NMS Stock.

When an FRS Order or CO (including any associated Firm-up Order) is entered into Citi-ONE, the ATS will use the side and price conditions of the inbound FRS Order, CO, or Firm-up Order to derive an "Assigned Limit Price." The Assigned Limit Price is defined as the highest price for a buy order (lowest for a sell order) at which an order may be matched at or within the National Best Bid and Offer ("NBBO") after applying the price conditions selected by the Participant. An Assigned Limit Price is applied in this manner including when an order is entered into the ATS with (i) a limit price above the NBO for a buy order or below the NBB for a sell order (i.e., an aggressive limit), or (ii) a peg condition including an aggressive limit. Market conditions that can affect the Assigned Limit Price of an order are Price Collars, NBBO, and / or LULD bands. Citi-ONE adjusts the Assigned Limit Price as necessary over the life of an order. These Citi-ONE adjustments to the Assigned Limit Price of an order will not change time priority. For NMS Stocks priced under \$1.00, if the Assigned Limit Price of an order would be the midpoint of the NBBO and the midpoint price extends to five decimal places, Citi-ONE will round the Assigned Limit Price to four decimal places as follows: the price of a buy order will be rounded down, and the price of a sell order will be rounded up.

Citi-ONE supports five contra-party Inclusion Levels for FRS Orders that add liquidity. Upon order entry, a Participant can denote the Inclusion Level as one of Levels 1 - 5 through a FIX tag. This Inclusion Level affects which liquidity-taking orders liquidity-providing FRS Order may interact with, based on the Taker Levels of the liquidity-taking orders. See Part III, Item 13.

~~A Firm-up Order generated by a CO must be submitted with a limit or peg and limit condition that is the same or better than the limit or peg and limit condition of the underlying CO. If a Participant submits a Firm-up Order with a limit or peg and limit condition that is worse than the limit or peg and limit condition of the underlying CO, the Firm-up Order will be rejected.~~

As described more fully in Part III, Item 15, aggregated information about Participant FRS Orders is provided to CGMI's algos and SOR for use solely in connection with making decisions about whether and when to route orders to Citi-ONE and the price conditions and quantity of orders routed to Citi-ONE.

iii. FRS Orders with a time-in-force designation of DAY (see below) may be submitted with a "post only" instruction. FRS Orders designated as "post only" are eligible to interact with subsequent contra-side FRS Orders (including Firm-up Orders), or (if configured to be an Eligible FRS Order) COs. As Citi-ONE processes two orders for a potential match, the liquidity-providing order is the order that was received by Citi-ONE first-in-time and the liquidity-taking order is the order that was received by Citi-ONE second-in-time. In the event an FRS Order marked "post only" is marketable against another FRS Order that is "post only," the two opposing "post-only" orders will not match with each other. Both FRS Orders will be

accepted, reside in Citi-ONE and will only match against a subsequently entered contra-side order that is not marked "post only."

The "post only" designation does not apply to COs or MOC Orders. If COs or MOC Orders are marked "post only," they will be rejected.

iv. Regarding order types that adjust their price as changes to the order book occur, Citi-ONE supports three types of peg conditions with respect to FRS Orders and COs (i.e., primary peg, midpoint peg, and market peg), all of which are also required to have limit prices. MOC Orders may only be submitted as market orders.

FRS Orders and COs that include a primary peg condition will be priced to the near side of the NBBO (i.e., NBB for buy orders, NBO for sell orders) and are subject to price changes upon a change to the NBBO. FRS Orders and COs that include a primary peg condition will represent a bid price up to, or offer price down to, a Participant's limit price or an Assigned Limit Price if the Participant's original limit is aggressively priced through the NBBO.

FRS Orders and COs that include a midpoint peg condition will be priced to the midpoint of the NBBO and are subject to price changes upon a change to the NBBO. FRS Orders and COs that include a midpoint peg condition will represent a bid price up to, or offer price down to, a Participant's limit price or an Assigned Limit Price if the Participant's original limit is aggressively priced through the NBBO.

FRS Orders and COs that include a market peg condition will be priced to the far side of the NBBO (i.e., NBO for buy orders, NBB for sell orders) and are subject to price changes upon a change to the NBBO. FRS Orders and COs that include a market peg condition will represent a bid price up to, or offer price down to, a Participant's limit price or an Assigned Limit Price if the Participant's original limit is aggressively priced through the NBBO.

The price at which two FRS Orders and/or COs match will depend on the attributes of both the buy order and the sell order involved in the match (i.e., a sell order with a market peg condition may match on the bid, at the midpoint, or at the offer). FRS Orders and COs that include peg conditions in addition to the Participant's limit price will match at the price closest to the midpoint of the NBBO that is compatible with both orders (e.g., taking into consideration whether one or both orders includes a limit governing the matching price). If the Assigned Limit Price of one or both of the matching orders resides at the midpoint, or if both straddle the midpoint, the matching price will be at the midpoint. When the buy and sell order Assigned Limit Prices straddle a five-decimal midpoint price, the matching price will be rounded based on the side of the earlier (resting) order to the nearest four-digit price.

Citi-ONE adjustments to the Assigned Limit Price of an FRS Order or CO will not change time priority. This includes FRS Orders or COs with peg conditions that are updated in accordance with an NBBO update. If a Participant amends the limit price of an FRS Order or CO, Citi-ONE

will update the Assigned Limit Price as appropriate. This type of update by a Participant would affect the time stamp (and therefore potentially the priority) of the FRS Order or CO. In addition, although a change in the NBBO would not affect the relative priority of FRS Orders or COs that include a peg condition, an NBBO change could affect whether FRS Orders or COs that include peg conditions may become eligible for matching and the price at which those orders are matched.

v. Citi-ONE does not route orders to other Trading Centers. See Part III, Item 16.

vi. TIF INSTRUCTIONS AVAILABLE FOR FRS ORDERS

Citi-ONE supports DAY and Immediate-or-Cancel ("IOC") time-in-force designations for FRS Orders.

An FRS Order with a TIF of DAY will remain in Citi-ONE until it is cancelled, fully executed, or at market close. FRS Orders with a TIF of DAY may be modified, replaced, or cancelled by a Participant; modifications may affect priority (see above).

An FRS Order with a TIF of IOC will only attempt to match immediately with resting contra-side FRS Orders. If the IOC order cannot be partially or completely matched immediately, Citi-ONE will cancel the balance of the unmatched quantity of the IOC order. IOC orders may not be modified, replaced, or cancelled by a Participant.

TIF INSTRUCTION AVAILABLE FOR COs

Citi-ONE supports only the DAY TIF designation on COs, including Firm-up Orders. Firm-up Orders must be submitted during the Firm-up Period, which is 500 milliseconds, beginning when the Firm-up Request is sent by Citi-ONE.

TIF INSTRUCTION AVAILABLE FOR MOC ORDERS

Citi-ONE supports only the On Close TIF instruction on MOC Orders.

vii. Any combinations of FRS Order conditions or attributes described above, with the exception of "post only" together with the "IOC" attribute, are valid (including peg conditions with a TIF of IOC). Participants can change a TIF designation on an FRS Order from DAY to IOC (which would create a new time stamp on the order). However, Participants may not change a TIF from IOC to DAY. In the event that a Participant changes a TIF designation on a FRS Order from DAY to IOC, Citi-ONE will (a) re-evaluate and update the Assigned Limit Price of the order as may be necessary, (b) scan the book for available contra-side interest, treating the order as a liquidity-taking order, and (c) match or cancel the order. An FRS Order will be rejected or cancelled for various reasons including incomplete order instructions or if the order message

contains an invalid instruction or parameter (e.g., missing side). All orders, including FRS Orders, will be cancelled on disconnect ("COD").

COs, including Firm-up Orders, will be rejected or cancelled for various reasons, including but not limited to incomplete order instructions or if the order message contains an invalid instruction or parameter (e.g., missing side). All orders, including COs and their Firm-up Orders, will be COD.

An MOC Order will be rejected or cancelled if: it is submitted after the MOC Cut-off Time (3:44:59 PM ET); it contains incomplete order instructions; it contains an invalid instruction or parameter (e.g., missing side); it is marked short or short exempt; it is for a symbol that is halted or paused; it includes a TIF other than DAY; or it contains a conditional tag. All orders, including MOC Orders, will be COD. If the disconnect occurs at or after the designated match time for MOC Orders (3:45 PM ET), COD will not apply, even if the Participant has not yet received notice of the execution.

The Citi-ONE FIX specification, which applies to all Participants' orders and is provided at onboarding, details all cancel and reject reasons for orders.

In addition, Citi-ONE accepts new orders, modifications, and cancellations when the market for an NMS Stock is locked or crossed. During the RTS, Citi-ONE will prevent matching in NMS Stocks with an NBBO that is locked or crossed.

viii. The order types and attributes noted above are all available on FIX version 4.2 which is the only protocol supported by Citi-ONE.

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

Yes ☒ No ☐

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).

Citi-ONE accepts Conditional Orders and their associated Firm-up Orders, described below, during the Regular Trading Session. A CO is a message indicating trading interest; it is not an auto-executable order. COs must include each of the following parameters or it will not be accepted: side, symbol, quantity, TIF of DAY, price (limit price), and conditional order tag. COs may also include a peg condition (primary, midpoint, or market peg). COs submitted as "post only" or with a TIF of IOC will be rejected. COs are eligible to match with other COs and with Eligible FRS Orders. If an Inclusion Level is included on a CO, the Inclusion Level will be ignored (see Part III, Item 13).

Participants can choose to allow interaction between FRS Orders ("Eligible FRS Orders") and COs (by default, COs will only interact with other COs) on an order-by-order basis.

Eligible FRS Orders must include a TIF of DAY to interact with COs. Citi-ONE will attempt to match a CO with another CO before attempting to match a CO with an Eligible FRS Order. For greater detail regarding the matching priority with respect to Conditional and Eligible FRS Orders, see Part III, Items 7 and 11.

Participants may set a minimum executable quantity and/or maximum quantity threshold for COs. For a description of minimum executable quantity and maximum quantity, see Part III, Items 11 and 14. Minimum and maximum order sizes are discussed in Part III, Item 8.

FIRM-UP REQUESTS

In the event of a potential match of a CO with a contra-side CO or Eligible FRS Order, a FIX message is sent to the Participant or CGMI algo that sent the original CO(s) requesting the originator of the CO(s) to send a Firm-up Order ("Firm-up Request"). To the extent a CGMI algo sent the relevant CO to Citi-ONE, the Firm-up Request will pass through the SOR before

arriving at the CGMI algo (i.e., there is no direct messaging from Citi-ONE to the CGMI algo). A Firm-up Request informs the recipient ~~only~~ that the opportunity to match exists and contains ~~all of~~ the same trade parameters as the CO to which the Firm-up Request is sent except it includes the quantity associated with the smaller of the two orders that triggered the potential match (either the two COs or the CO and Eligible FRS Order). A Firm-up Request does not provide information on price ~~or size~~ of the contra-side order or whether the contra-side order is a CO or an Eligible FRS Order.

For Participants accessing Citi-ONE indirectly, the CGMI algos originate and manage the placement of COs across various trading centers, including Citi-ONE, and participate in the Citi-ONE firm-up process if matching opportunities are presented. When a Firm-up Request has been sent for a CO that was directed to Citi-ONE by the CGMI algos, the CGMI algos may elect to send a Firm-up Order (through the SOR).

FIRM-UP PERIODS

A Firm-up Order is tentatively designated for matching with the contra-side order that generated the Firm-up Request.

Each Firm-up Request is valid for up to 500 milliseconds (500ms) (the "Firm-up Period"), which begins when the Firm-up Request is sent by Citi-ONE. At any time in its reasonable discretion, CGMI may modify the Firm-up Period and provide notification of such change to Participants via an amendment to the Citi-ONE Form ATS-N. CGMI will also, on a best-efforts basis, notify Participants via email. The recipient of a Firm-up Request may respond with a Firm-up Order during the Firm-up Period. If the recipient of that Firm-up Request does not reply with a Firm-up Order before expiration of the Firm-up Period, the corresponding CO is cancelled.

FIRM-UP ORDERS

Citi-ONE accepts Firm-up Orders submitted in response to Firm-up Requests. Firm-up Orders submitted to Citi-ONE must include each of the following parameters: side, symbol, quantity, order TIF of DAY, price (limit price), and conditional order tag. Firm-up Orders may also include a peg condition (primary, midpoint, or market peg). ~~The~~ Participants (or, as noted above, the algos and/or SOR on behalf of COs directed to Citi-ONE by the CGMI algos) cannot change the trade parameters of the Firm-up Order submitted in response to a Firm-up Request ~~cannot deviate~~ from the trade parameters of the underlying CO ~~of the Participant sending the Firm-up Order~~, except with respect to the quantity and price parameter. ~~The price of a~~ A Firm-up Order may be changed in way that is more favorable to the potential match than the price of the underlying CO with a changed price will only result in a match if the new price is within the contra-side Firm-up Order or Eligible FRS Order's limit or peg and limit condition. Subject to these exceptions for quantity and price, Firm-up Orders that do not match the trade parameters of

the underlying CO will be rejected. All Firm-up Orders will be treated as IOC, and any shares not matched will be cancelled.

When a CO is a potential match with another CO, a Firm-up Request will be sent to the Participants that originated both COs. Upon Firm-up Requests being triggered between two COs, each order will be "reserved" for a period that will not exceed the Firm-up Period. If both Participants respond with Firm-up Orders within the Firm-up Period, a match may take place for the lesser quantity of the two Firm-up Orders. When Firm-up Orders match, any unmatched quantity of a Firm-up Order will be cancelled.

When an Eligible FRS Order is a potential match with a CO, a Firm-up Request will be sent to the Participant representing the CO. Upon a Firm-up Request being sent to the Participant representing the CO, each order will be "reserved" for a period that will not exceed the Firm-up Period. If the CO responds with a Firm-up Order within the Firm-up Period, the orders will be matched for the lesser quantity of the Eligible FRS Order quantity or the Firm-up Order. However, if at the time the Firm-up Order arrives, there is one or more higher-ranked FRS Order on the same side of the market as the Eligible FRS Order that initiated the Firm-up Request, the Firm-up Order will first interact with the higher-ranked FRS Order(s) and any remaining quantity may interact with the initial Eligible FRS Order. The higher-ranked FRS Order(s) may not have interacted with the CO initially because (i) it was not an Eligible FRS Order or (ii) it arrived or was reprioritized after the Firm-up Period started. If the initially received Eligible FRS Order is not matched or not matched in full, any residual shares will become unreserved, re-eligible for matching, and retain time priority.

EXAMPLES OF REASONS CONDITIONAL ORDER(S) MAY NOT MATCH

The following are non-exhaustive examples of reasons why a potential match involving a CO on one or both sides of the market may not match: (i) the order(s) could not match as the minimum executable quantity and/or maximum quantity was not satisfied for one of the orders, (ii) the orders could not match as one or both of the COs became non-marketable due to a movement in the NBBO during the Firm-up Period, (iii) the Firm-up Period timed out on one or both of the opposite side CO(s), (iv) the NBBO is currently locked (the national best bid price and ask price are the same), (v) the NBBO is currently crossed (bid price is greater than ask price), (vi) the opposing FRS Order may get cancelled (in case of interaction with an Eligible FRS Order) or the opposing CO may not firm up (send a Firm-up Order) during the Firm-up Period, and (vii) the Firm-up Order might be rejected due to Rule 15c3-5 controls.

OTHER ORDER INFORMATION

COs (and MOC Orders) are not included in the Exegy data feeds sent to the CGMI algos and SOR, as described further in Part III, Item 15.

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 ☐

Item 13: Segmentation; Notice

a. Are orders and trading interest in the NMS Stock ATS segmented into categories, classifications, tiers, or levels (e.g., segmented by type of participant, order size, duration, source, or nature of trading activity)?

Yes ☒ No ☐

If yes, explain the segmentation procedures, including (i) a description for how orders and trading interest are segmented; (ii) identify and describe any categories, classification, tiers, or levels and the types of orders and trading interest that are included in each; (iii) provide a summary of the parameters for each segmented category and length of time each segmented category is in effect; (iv) any procedures for overriding a determination of segmented category; and (v) how segmentation can affect order interaction.

INCLUSION LEVELS

FRS Orders submitted by Citi-ONE ~~Participants~~ Direct Subscribers and directed FRS Orders submitted by Indirect Subscribers that remove liquidity are ranked by CGMI at five different levels (Taker 1 through Taker 5) (each, a "Taker Level"), based on a Mark-out Analysis performed by CGMI as described below. FRS Orders submitted by CGMI Business Units and CGMI Affiliates and non-directed FRS Orders submitted by Indirect Subscribers do not go through the Mark-out Analysis.

When two orders match on Citi-ONE, the liquidity-providing order is always the first-in-time order and the liquidity-taking order is always the second-in-time order. Citi-ONE permits Participants submitting FRS Orders to apply an Inclusion Level, and it will apply the Inclusion Level selected by the liquidity-providing FRS Order in a match; any Inclusion Level tag associated with a liquidity-taking FRS Order will be ignored. Inclusion Levels indicate the willingness of the liquidity provider to interact with an identified Taker Level. Inclusion Level 5 results in the most inclusive interaction, allowing a liquidity-providing order to interact with FRS Orders at all Taker Levels; and Inclusion Level 1 results in the most exclusive interaction, permitting a liquidity-providing order to interact only with Taker Level 1 orders (see discussion below regarding IMPACT OF INCLUSION LEVEL SELECTION ON ORDER INTERACTION). If no Inclusion Level is applied, an order will be treated as if it had applied Inclusion Level 5. All liquidity-providing FRS Orders, regardless of Inclusion Level, are eligible to interact with liquidity-taking FRS Orders submitted by CGMI Business Units and CGMI Affiliates and non-directed liquidity-taking FRS Orders submitted by Indirect Subscribers, though other order parameters (for example, DNCP, MinQty, or MaxQty) may prevent a match.

CATEGORY ID ASSIGNMENT

A Participant sending liquidity-taking FRS Orders can distinguish various aspects of its order flow to CGMI by using one or more Category IDs, which will be used in the Mark-out Analysis, if applicable.

A Category ID is an indicator a Direct Subscriber can attach or an Indirect Subscriber can request CGMI to attach to an order. A Participant can utilize multiple Category IDs to distinguish, for example, order flow from different business lines, particular underlying clients, child orders associated with particular trading strategies, or order flow of affiliated entities. For example, a broker-dealer Participant could have four Category IDs associated with that Participant's FRS Orders - one for order flow from its Cash High Touch Desk, one for its Agency Program Desk order flow, one for its Central Risk Desk order flow, and one for the remainder of its FRS Order flow. Similarly, and by way of further example, asset managers and hedge fund Subscribers could assign a Category ID for each fund separately managed. Participants are not required to have multiple Category IDs. If no Category ID is entered by a Participant or only one Category ID is used, the Mark-out Analysis, if applicable, will consider all of a Participant's liquidity-taking FRS order flow collectively.

CGMI Business Units similarly may elect to segment their principal order flow through the same process as other Participants, by attaching Category IDs to FRS Orders routed to Citi-ONE.

CGMI assigns an initial Category ID to order flow from a CGMI Affiliate that represents the principal interest of the CGMI Affiliate (and separate Category IDs to order flow representing the interests of each of the CGMI Affiliate's customers), however this cannot be used to prevent Subscriber orders from interacting with orders that are on behalf of CGMI Affiliates' principal accounts as all such orders are handled by CGMI in an agency capacity, which is the designation that the DNCP instruction relies on.

CGMI may use Category IDs to distinguish order flow for Participants that access Citi-ONE via the CGMI algos and/or SOR. If an Indirect Subscriber or CGMI Business Unit does not segment their orders into multiple Category IDs, CGMI's algos and/or SOR may be instructed by ~~Execution Advisory Services or~~ MQA to apply multiple Category IDs to the flow (unless the Indirect Subscriber or CGMI Business Unit requests that their flow not be segmented into multiple Category IDs). ~~Execution Advisory Services or~~ MQA may also use additional Category IDs, beyond those initially assigned, to further segment CGMI Affiliate order flow. The applicable Category ID(s) might be based in whole or in part on execution optimization preferences (e.g., minimizing slippage) requested by the Indirect Subscriber, CGMI Business Unit, or CGMI Affiliate or may be set by ~~Execution Advisory Services or~~ MQA based on criteria such as historical fill rates, and spread capture, ~~and mark-outs of varying time intervals~~.

For all Participants, a Category ID may be selected on an order-by-order basis by populating a designated FIX tag. Direct Subscribers also may apply Category IDs at the subscriber level. If a

Direct Subscriber has a default Category ID and populates the designated FIX tag on a particular order, the order-specific Category ID will apply.

When an FRS Order is a liquidity-providing order upon arrival at Citi-ONE, any Category ID tag associated with the order is ignored, as the order is liquidity providing rather than liquidity taking.

MARK-OUT ANALYSIS

CGMI maps all ~~Participant~~ liquidity-taking FRS ~~Order flow~~ Orders submitted by Citi-ONE Direct Subscribers and directed FRS Orders submitted by Indirect Subscribers into five Taker Levels based on its Mark-out Analysis, which, on a standardized, post-trade basis, evaluates the movement of an NMS Stock's midpoint over a short, configurable time horizon surrounding an execution in that NMS Stock. FRS Orders submitted by CGMI Business Units and CGMI Affiliates and non-directed FRS Orders submitted by Indirect Subscribers do not go through the Mark-out Analysis.

Citi-ONE ~~uniformly~~ applies the Mark-out Analysis to ~~all liquidity-taking FRS Order~~ applicable flow at the ~~Participant~~ Subscriber level or, if the ~~Participant or CGMI~~ Subscriber has segmented order flow using Category IDs, at the Category ID level. ~~The Participant's~~ As a general matter, the Subscriber's FRS Orders or the Category ID's FRS Orders will be subject to a Mark-out Analysis once there have been a minimum number of liquidity-taking FRS Order executions and a minimum number of total executed shares, as determined by CGMI, over a 30-day rolling period for that ~~Participant~~ Subscriber or Category ID that starts on the first day a ~~Participant's~~ or Subscriber's or Category ID's FRS Orders are sent to Citi-ONE. Every ~~Participant~~ applicable Subscriber and Category ID will be subject to the same minimum number of liquidity-taking FRS order executions and minimum number of total executed shares over a 30-day time frame; these thresholds will not vary by ~~Participant~~ Subscriber or Category ID. Until this threshold has been reached, a ~~Participant's~~ Subscriber's or the Category ID's liquidity-taking FRS Orders will be defaulted to Taker Level 3.

CGMI will use the results of the Mark-out Analysis to determine how favorable, on an aggregate basis, the executions associated with a particular ~~Participant~~ Subscriber or Category ID were for the liquidity provider, on a scale of 1 through 5, with 1 being most favorable, and 5 being most unfavorable. The ~~Participant~~ Subscriber or Category ID order flow as a whole is assigned a corresponding Taker Level 1 through 5.

CGMI conducts a new Mark-out Analysis for ~~all Participants~~ applicable Subscribers and Category IDs approximately monthly. CGMI may change without notice a ~~Participant's~~ Subscriber's or Category ID's assigned Taker Level based on the results of a new Mark-out Analysis. After CGMI performs a Mark-out Analysis, any new or changed Taker Level(s) will become effective within seven (7) business days.

CGMI reserves the right to move a Subscriber or Category ID from a lower Taker Level (e.g., Taker Level 3) to a higher Taker Level (e.g., Taker Level 5)--reflecting that executions with this Subscriber or Category ID are less favorable for the liquidity provider--before the completion of the 30-day rolling period (and regardless of the number of executed shares) for new Subscribers and Category IDs and on an intramonth basis for existing Subscribers and Category IDs if a review of the Subscriber's or Category ID's executions warrants such a change in CGMI's sole discretion. In exercising this discretion, CGMI may consider, among other factors, deviations from previous trading behavior of a Subscriber or Category ID (e.g., atypical timing of orders or changes in types of symbols for which the Subscriber or Category ID sends orders); volume of trading (e.g., sporadic volume or excessive volume of liquidity-taking orders); and whether the Subscriber or Category ID has otherwise exhibited behavior inconsistent with their assigned Taker Level. Taker Level changes made pursuant to this paragraph become effective overnight.

CGMI may, in its sole discretion and without notice to ~~Participants~~Subscribers, change the methodology used to assign ~~Participants~~Subscribers or Category IDs to a particular Taker Level.

The results of the Mark-out Analysis and the methodology for conducting the Mark-out Analysis are reviewed on a periodic basis at governance meetings comprised of the ATS Supervisor (or approved Series 24 delegate) and representatives from MQA, Equities Management, Technology, and/or Product and Electronic Trading Compliance.

Upon request, including a one-time request or requests to receive updates any time a Taker Level is changed, Citi-ONE will inform a ~~Participant~~Subscriber on a best-efforts basis either verbally or in writing of the ~~Participant's~~Subscriber's and/or its Category ID's designated Taker Level. A ~~Participant~~Subscriber cannot contest its designated Taker Level. See Part III, Item 13(d).

IMPACT OF INCLUSION LEVEL SELECTION ON ORDER INTERACTION

As noted, Participants may designate an Inclusion Level for their FRS Order(s) and Citi-ONE will apply the Inclusion Level selected by the liquidity-providing FRS Order in a match; any Inclusion Level tag associated with a liquidity-taking FRS Order will be ignored. The selected Inclusion Level determines the Taker Level(s) with which a Participant's liquidity-providing order(s) may interact.

For all Participants, an Inclusion Level may be selected on an order-by-order basis by populating a designated FIX tag. In the event that no Inclusion Level is specified for an FRS Order, the FRS Order will be treated as an Inclusion Level 5 FRS Order (i.e., eligible to interact with all Taker Levels).

The impact of selecting Inclusion Level 1, 2, 3, 4, or 5, is as follows. When a Participant sending a liquidity-providing FRS Order selects Inclusion Level 1, the Participant's order will only interact with Taker Level 1 orders. If a Participant sending a liquidity-providing FRS Order selects Inclusion Level 2, the Participant's order will only interact with Taker Level 1 or 2 orders.

If a Participant sending a liquidity-providing FRS Order selects Inclusion Level 3, the Participant's order will only interact with Taker Level 1, 2, or 3 orders. If a Participant sending a liquidity-providing FRS Order selects Inclusion Level 4, the Participant's order will only interact with Taker Level 1, 2, 3, or 4 orders. If a Participant sending a liquidity-providing FRS Order selects Inclusion Level 5 or does not select an Inclusion Level, the Participant's order will interact with Taker Level 1, 2, 3, 4, or 5 orders. All liquidity-providing FRS Orders, regardless of Inclusion Level, are eligible to interact with liquidity-taking FRS Orders submitted by CGMI Business Units and CGMI Affiliates and non-directed liquidity-taking FRS Orders submitted by Indirect Subscribers, though other order parameters (for example, DNCP, MinQty, or MaxQty) may prevent a match.

NON-FRS ORDER TYPES

Inclusion Levels are not applicable to Conditional Orders (including any related Firm-up Orders) or Market on Close Orders. If one of these orders is accompanied by an Inclusion Level, that instruction will be ignored. Conditional Orders (including any related Firm-up Orders) and Market on Close Orders are also not treated as liquidity-taking orders for purposes of assigning Taker Levels. These order types are not scored by the Mark-out Analysis and do not impact the Taker Level assigned to a Participant or Category ID. If one of these orders is accompanied by a Category ID, that instruction will be ignored. For more information on Conditional Orders, including Firm-up Order interactions with FRS Orders, see Part III, Items 7, 9, and 11, and for more information on Market on Close Orders, see Part III, Items 11 and 17.

b. If yes to Item 13(a), is the segmentation of orders and trading interest the same for all Subscribers and the Broker-Dealer Operator?

Yes ☐ No ☒

If no, identify and explain any differences.

As explained in Part III, Item 13(a), ~~if~~ FRS Orders submitted by Citi-ONE Direct Subscribers and directed FRS Orders submitted by Indirect Subscribers that remove liquidity are ranked by CGMI are assigned one of Taker Level 1 through 5 based on the Mark-out Analysis performed by CGMI. Liquidity-taking FRS Orders submitted by CGMI Business Units and CGMI Affiliates and non-directed liquidity-taking FRS Orders submitted by Indirect Subscribers do not go through the Mark-out Analysis. If an Indirect Subscriber or CGMI Business Unit does not segment their orders into multiple Category IDs, CGMI's algos and/or SOR may be instructed by ~~Execution Advisory Services or~~ MQA to apply multiple Category IDs to the flow (unless the Indirect Subscriber or CGMI Business Unit requests that their flow not be segmented into multiple Category IDs). ~~Execution Advisory Services or~~ MQA may also use additional Category IDs, beyond those initially assigned, to further segment CGMI Affiliate order flow. This process may result in the flow of some Indirect Subscribers, CGMI Business Units, or CGMI Affiliates

being segmented into multiple Category IDs and others not segmented. This process does not apply to Direct Subscriber flow.

c. Does the NMS Stock ATS identify orders or trading interest entered by a customer of a broker-dealer on the NMS Stock ATS as a customer order?

Yes ☐ No ☒

d. If yes to Item 13(a), does the NMS Stock ATS disclose to any Person the designated segmented category, classification, tier, or level of orders and trading interest?

Yes ☒ No ☐

If yes, provide a summary of the content of the disclosure, when and how the disclosure is communicated, who receives it, and whether and how such designation can be contested.

Upon request, including a one-time request or requests to receive updates any time a Taker Level is changed, Citi-ONE will inform a ~~Participant~~Subscriber on a best-efforts basis either verbally or in writing of the ~~Participant's~~Subscriber's and/or its Category ID's designated Taker Level. A ~~Participant~~Subscriber cannot contest its designated Taker Level.

e. If yes to Item 13(d), are the disclosures required to be identified in 13(d) the same for all Subscribers and the Broker-Dealer Operator?

Yes ☐ No ☒

If no, identify and explain any differences.

Because Citi-ONE provides a ~~Participant~~Subscriber with their designated Taker Level(s) upon request and on a best-efforts basis and there is no formal process for informing ~~Participants~~Subscribers of their assigned Taker Level(s), some ~~Participant~~Subscriber(s) may be made aware of their Taker Level(s) while others are not.

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.

Citi-ONE does not display information to any Person(s) for the purposes of Rule 301(b)(3) of Regulation ATS. However, Citi-ONE, via Ocean and Exegy as described below, provides three real-time, continuous data feeds to CGMI's algos and SOR that contain aggregated and anonymized buy and sell information for resting FRS Orders from all Participants. These data feeds include symbol, side (buy or sell), quantity available at or within the NBBO across all Participants, and timestamp (of the snapshot included on each continuous data feed from Citi-ONE, not the timestamp of any individual order). The aggregate quantity is represented at three price levels within the NBBO on each side: the bid (buy and sell orders at the bid price), midpoint (buy and sell orders at the midpoint price), and offer (sell and buy orders at the offer price). Ocean provides aggregated and anonymized buy and sell information for Citi-ONE Participants' resting FRS Orders to third-party data feed provider, Exegy, and Exegy puts this information into three feeds that it delivers to the CGMI algos and SOR. In a situation where all of the interest within the NBBO on a given side of the market is reflected by a single Participant FRS Order, that FRS Order will still be included in the feeds. Although it cannot be aggregated, the feeds will not reflect that the interest is comprised of a single FRS Order, and the FRS Order will still be anonymized. CGMI's algos and SOR use the data in the feeds solely to make efficient real-time decisions regarding whether and when to route orders to Citi-ONE, and what price conditions and quantity to apply to those orders. Aggregated and anonymized FRS Order information is transmitted to the CGMI algos and SOR regardless of whether the FRS Orders included were sent to Citi-ONE directly or indirectly. Participants may not opt out of having their resting FRS Orders included in the data feeds.

In addition, when a CO has a potential match, a "Firm-up Request" is sent requesting the originator of the CO to send a Firm-up Order. A Firm-up Request informs the recipient (the originator of the CO) ~~only~~ that the opportunity to match exists and the quantity associated with the smaller of the two orders that triggered the potential match (either the two COs or the CO and Eligible FRS Order), but does not provide information on price ~~or size~~ of the contra-side order or whether the contra-side order is a CO or an Eligible FRS Order (as discussed in Part III, Item 9).

The CGMI algos and/or SOR have knowledge of orders that CGMI sent to Citi-ONE on behalf of Indirect Subscribers, CGMI Business Units, and CGMI Affiliates.

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.

The data feeds described above in response to Item 15(b) are only provided to CGMI's algos and SOR.