

Form ATS-N Exhibit 3 for ATS-1 (MS Trajectory Cross)

Part Number	Item Number	Question	Answer
Part II	Item 1a	<p>Are business units of the Broker-Dealer Operator permitted to enter or direct the entry of orders and trading interest (e.g. quotes, conditional orders, or indications of interest) into the NMS Stock ATS?</p> <p>If yes, name and describe each type of business unit of the Broker-Dealer Operator that enters or directs the entry of orders and trading interest into the ATS (e.g., NMS Stock ATS, type of trading desks, market maker, sales or client desk) and for each business unit, provide the applicable MPID and list the capacity of its orders and trading interest (e.g., principal, agency, riskless principal).</p>	<p>Yes.</p> <p>Any sales or trading business in the Institutional Equity Division (IED) or Fixed Income Division (FID) of MS&Co can enter an order directly into ATS-1 or into Morgan Stanley algorithms, certain of which generate conditional indications (as described in Part III, Item 9(a)) in ATS-1 on behalf of such business units. Those conditional indications may receive firm-up requests which may, in turn, result in orders (as described in Part III, Item 7(a)) entered into ATS-1.</p> <p>Business units of the Broker-Dealer Operator can enter orders in Morgan Stanley algorithms, which in turn can result in conditional indications and/or orders being placed in ATS-1 on behalf of such business units on an agency, principal, or riskless principal basis. All business units of MS&Co use the MSCO MPID. Business units are described below and reflect the desk trading and managing risk for such product.</p> <ul style="list-style-type: none"> - Core (Cash) Products (trading and market making related to domestic and international equities) - ETF (trading of domestic and international exchange traded funds and underlying equities) - Morgan Stanley Electronic Trading (electronic trading of equities, options, and futures) - Portfolio Products/Program Trading (trading of customer single orders and program orders; executing guaranteed benchmark trades and blind principal risk transactions) - Automated Marking Making (listed equity options market making and related hedging)

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			<ul style="list-style-type: none"> - Convertible Products (trading of convertible bonds, convertible preferred equities, and equity warrants) - Corporate Equity Products (handling of corporate repurchases) - Exotic Products (trading of structured notes, complex OTC equity derivatives products, single name volatility/variance swaps, and dispersion) - Index Products (trading of listed and OTC broad- and narrow-based index options, ETF options, ETN options, volatility index options, depository receipt options, volatility/variance swaps, equity structured products (OTC), and volatility index futures) - Single Name Products (trading of listed and OTC equity options, equity sector index options, ETF options, depository receipt options, ETN options, volatility/variance swaps, and dividend swaps) - Core Prime Brokerage (trading of equities, equity options, and other equity-related instruments to manage stock lending risk) - Delta One Structured Products (engaging in financing transactions in a variety of equity and equity-related instruments by providing long and short equity linked exposure both with clients and swap market participants; structuring of customized financing, yield enhancement and hedging transactions for clients and Morgan Stanley) - Macro Products - (1) FXEM (trading of currency products such as spot FX, FX options, forwards, NDFs and related FX derivatives; emerging markets credit securities and related derivatives); and (2) Interest Rate Products (trading of interest rate products such as US Treasury securities, interest rate derivatives and structured notes) - Credit Products - (1) Credit Corporates (trading of credit corporate products including corporate bonds, CDS, credit indices, corporate loans or other credit derivatives; (2) Municipal Securities (trading of municipal securities and related derivatives); (3) Securitized Products Group (trading of securitized products including ABS, CMBS, RMBS, CLOs, CDOs, CDS, credit indices, agency debt securities, and whole loans) - Commodities (trading of commodities including but not limited to oil, metals, power and natural gas)

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			Please note, unless stated otherwise, all disclosures in the following sections will apply to both books within the ATS.
Part II	Item 2a	<p>Are Affiliates of the Broker-Dealer Operator permitted to enter or direct the entry of orders and trading interest into the NMS Stock ATS?</p> <p>If yes, name and describe each type of Affiliate that enters or directs the entry of orders and trading interest into the ATS (e.g. broker-dealer, NMS Stock ATS, investment company, hedge fund, market maker, principal trading firm), and, for each Affiliate, provide the applicable MPID and list the capacity of its orders and trading interest (e.g., principal, agency, riskless principal).</p>	<p>Yes.</p> <p>MS&Co has affiliates, including investment advisers, investment companies, U.S. broker-dealers, foreign broker dealers or equivalent entities; non broker-dealers; and bank regulated entities. Any such affiliate can enter orders on an agency, principal, or riskless principal basis directly into ATS-1 or into Morgan Stanley algorithms, certain of which algorithms generate conditional indications (as described in Part III, Item 9(a)) in such capacity in ATS-1 on behalf of such affiliates or affiliate's clients. Those conditional indications may receive firm-up requests which may, in turn, result in orders (as described in Part III, Item 7(a)) entered into ATS-1.</p> <p>Since the effective date of the initial Form ATS-N for ATS-1, the following affiliates have executed in ATS-1:</p> <ul style="list-style-type: none"> - Morgan Stanley Canada Limited (foreign) - Morgan Stanley Capital Services LLC (non BD) - Morgan Stanley & Co. International plc (foreign) - Morgan Stanley Hedge Co. Ltd (non BD) - Morgan Stanley Smith Barney LLC (MPID: MSSB) - Morgan Stanley Strategic Investments, Inc (non BD) - Morgan Stanley Uruguay Ltda. (foreign) - Mitsubishi UFJ Morgan Stanley Securities Co., Ltd. (foreign) - Mitsubishi UFJ Morgan Stanley PB Securities Co., Ltd. (foreign) - Morgan Stanley Fixed Income Ventures Inc. (non BD)

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			<p>- Morgan Stanley Bank, N.A. (non BD)</p> <p>With the exception of Morgan Stanley Smith Barney LLC, the affiliates listed above are either non broker-dealers (notated with "non BD") or foreign-broker dealers (notated with "foreign") and as such do not have their own MPID. As indicated, the above is a list of affiliates that have historically executed in ATS-1. The Broker-Dealer Operator will update this list to add any affiliate that subsequently executes in ATS-1 and to remove any entity that ceases to be an affiliate of the Broker-Dealer Operator.</p>
Part II	Item 5a	<p>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)?</p> <p>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 II 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.</p>	<p>Yes.</p> <p>As a full-service broker-dealer, MS&Co provides Subscribers and the Broker-Dealer Operator (Participants) with access to a number of products including algorithmic trading products, smart order routing technology, connectivity with third-party order entry systems via FIX, and Morgan Stanley proprietary order entry systems. Any of these products can be used to enter orders or conditional indications that can access ATS-1 directly or indirectly (such as via algorithmic trading products). (See Part III, Item 5). There are no specific terms and conditions for use of these products to access ATS-1.</p>

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			Subscribers (including affiliates of the Broker-Dealer Operator) and the Broker-Dealer Operator cannot access ATS-1 directly. ATS-1 can only be accessed indirectly through certain Morgan Stanley algorithms that generate conditional indications for entry in ATS-1 and potentially generate orders with respect to those conditional indications following a firm-up request. There are no specific terms and conditions for use of the Morgan Stanley algorithms that can access ATS-1.
Part II	Item 6a	<p>Does any employee of the Broker-Dealer Operator or its Affiliate that services both the operations of the NMS Stock ATS and any other business unit or any Affiliate of the Broker-Dealer Operator ("shared employee") have access to confidential trading information on the NMS Stock ATS?</p> <p>If yes, identify the business unit, Affiliate, or both that the shared employee services, and provide a summary of the role and responsibilities of the shared employee at the ATS and the business unit, Affiliate, or both that the shared employee services.</p>	<p>Yes.</p> <p>The Broker-Dealer Operator does not run ATS-1 as a separate business, but rather operates it as one trading product or venue within the full service broker-dealer. There are no employees exclusively dedicated to ATS-1.</p> <p>MS&Co considers confidential trading information of ATS-1 to be (1) conditional indication related information received by ATS-1 from Morgan Stanley algorithms; (2) firm-up request related information transmitted by ATS-1 to the Morgan Stanley algorithm that sent the corresponding conditional indication; (3) order-related information received by ATS-1 from a Morgan Stanley algorithm in response to a firm-up request; (4) execution-related information in ATS-1 (including identities of contra-parties to an execution); and (5) data and analytics related solely to the activity of ATS-1 (with the exception of information made publicly available pursuant to reporting rules and regulations).</p>

Part Number	Item Number	Question	Answer
			<p>Listed below are the shared employees (which include employees and personnel such as consultants, temporary workers, and contingent workers of Morgan Stanley Services Group, Inc. (MSSG), an affiliated service entity that provides MS&Co and affiliates with certain inter-company services including, infrastructure group support, information processing, communications and occupancy, and equipment) that service both ATS-1 and MS&Co or an MS&Co affiliate and have access to confidential trading information of ATS-1, along with the basis for such access.</p> <p>- Information Technology and Operations employees: Various technology groups of MSSG and MS&Co are responsible for developing, monitoring, and testing and otherwise supporting various systems within MS&Co's trading infrastructure. Employees within these groups include developers, systems engineers, or network engineers for MS&Co systems, including ATS-1. They are responsible for reviewing and testing the coding, systems infrastructure, and network infrastructure that supports the MS&Co trading infrastructure including ATS-1 to ensure stability and continued functionality and are also responsible for developing, testing, and implementing additional functionalities for ATS-1 as needed. Certain of these technology-related employees have access to the real-time production environment for ATS-1. As a result and in order to support the operation and infrastructure of ATS-1, these technology-related employees are able to access databases containing conditional indication-related, firm-up related, order-related and execution-related information and other confidential trading information of ATS-1. Similarly, certain Operations employees support the clearance and settlement of transactions effected through MS&Co including transactions effected on ATS-1.</p>

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			<p>Those employees require access to confidential information of the Broker-Dealer Operator including confidential trading information of ATS-1, such as execution-related information and allocation information on order records, to assist in issues relating to clearance and settlement of such transactions.</p> <p>- Sales and Trading employees: Sales and trading employees, including account coverage, handle orders <u>and conditional indications</u> on behalf of clients. This could involve providing trading discretion to determine when and how to handle an order, <u>or conditional indication</u>, including routing an order to a Morgan Stanley algorithm that could generate a conditional indication in ATS-1, receive a firm-up request with respect to that conditional indication, and enter an order in ATS-1 in response to that firm-up request. Account representatives assigned to clients whose orders <u>or conditional indications</u> may be entered in an Morgan Stanley algorithm that may take such actions with respect to ATS-1 have access, with respect to each applicable client, <u>(1)</u> to the order information entered into the Morgan Stanley algorithm and prior to any information being entered into ATS-1 and/or conditional order information entered directly by the applicable client, including firm-up related information, (2) as a result of servicing such client, to <u>order and</u> execution-related information, including the fact that such client's order entered in a Morgan Stanley algorithm <u>or entered directly by such client</u> was matched in ATS-1 on a bilateral basis with trading interest from another Participant in ATS-1. Such sales and trading employees have access to their client information prior to entry and after execution in ATS-1. Account representatives have system entitlements only for the clients they</p>

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			<p>cover and only have visibility into where an order was ultimately routed and/or executed, whether to/in ATS-1 or any other market center.</p> <p>- Risk Management personnel: MS&Co has employees that perform business unit risk management functions including market risk, non-market risk, credit risk, and technology risk with respect to the businesses of the Broker-Dealer Operator including ATS-1. In performing these functions, these employees have access to conditional indication, order, and execution information and other confidential information relating to Morgan Stanley business activities, including confidential trading information of ATS-1, such as conditional-indication related information, firm-up related information, order-related information, execution-related information, and Morgan Stanley algorithm related trading activity.</p> <p>- Supervisory and Oversight employees: Employees acting in a supervisory or oversight capacity (including employees performing reviews at the direction of such employees) have access to confidential information relating to Morgan Stanley business activities, including confidential trading information of ATS-1. Certain of these employees, among other responsibilities, have supervisory responsibilities reasonably designed to ensure that ATS-1 operates as intended. They are also responsible for evaluating activity in ATS-1 in connection with regulatory obligations and conducting analyses in connection with such activity. In furtherance of these responsibilities, these employees have access to confidential trading information of ATS-1.</p>

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			- Legal, Compliance and other Guardianship functions: Employees in the Legal and Compliance Departments and others involved in complying with regulatory requirements support, with respect to such requirements, the businesses of MS&Co, including the business of ATS-1. These employees provide such support by, among other functions, responding to regulatory inquiries, conducting compliance and other reviews, performing internal audits of the trading infrastructure of the Broker-Dealer Operator (including the trading infrastructure supporting ATS-1), all with respect to activity within ATS-1. In the course of performing such functions and generally providing support to ATS-1, those employees have access, on an as-needed basis, to confidential trading information of ATS-1, such as conditional-indication information, firm-up related information, order-related information, and execution-related information in ATS-1.
Part II	Item 6c	<p>If yes to Item 6(b), does the service provider, or any of its Affiliates use the NMS Stock ATS services?</p> <p>If yes, identify the service provider, or the Affiliate as applicable, and the ATS services that the service provider or its Affiliates use.</p>	<p>Yes.</p> <p>As MSSG is an affiliate of the Broker-Dealer Operator, affiliates of the Broker-Dealer Operator are also affiliates of MSSG. Thus, affiliates of the Broker-Dealer Operator whose conditional indications, and related firm orders, are entered indirectly in ATS-1 identified in response to Part II, Item 2 are also affiliates of the service provider MSSG for purposes of this Item 6(c).</p>
Part II	Item 7a	<p>Describe the written safeguards and written procedures to protect the confidential trading information of Subscribers to the NMS Stock ATS including:</p> <p>i. written standards controlling employees of the ATS that trade for employees' accounts; and</p> <p>ii. written oversight procedures to ensure that the safeguards and</p>	<p>MS&Co maintains restrictions (including permissioned access) and policies and procedures designed to safeguard the confidential trading information of ATS-1.</p> <p>Access to confidential trading information of ATS-1 is limited to the shared employees described in Part II, Item 6(a) (that is, information technology and operations employees; sales and trading employees; risk management employees; supervisory and oversight employees; and legal, compliance, and other with guardianship functions), to the systems that support ATS-1, and to those Morgan Stanley</p>

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		procedures described above are implemented and followed.	<p>algorithms and order routing technology that can generate conditional indications for entry in ATS-1 and potentially can generate orders with respect to those conditional indications following a firm-up request. A description of applicable safeguards and oversight procedures is provided below.</p> <p>- Systems with Access to Order and Execution-Related Information: The order and execution management systems used by the sales and trading employees (including account representatives) described in response to Part II, Item 6(a), can route an order to a Morgan Stanley algorithm that can generate a conditional indication in ATS-1, among other trading interest to other destinations. Similarly, those Morgan Stanley algorithms and order routing technology (among activity in other destinations) can generate a conditional indication in ATS-1, receive firm-up requests with respect to those conditional indications, and enter orders in ATS-1 in response to such firm-up requests. These algorithms and order routing technology receive information regarding where such conditional indications were routed and/or any corresponding orders were executed, which could be ATS-1 or could be any other market center. These algorithms and order routing technology also receive firm-up requests and firm-up related information which indicate that there is potential contra-side interest in ATS-1. MS&Co maintains a database containing trading information of its NMS Stock ATSs. Authorized employees (generally, authorized information technology and operations employees and certain authorized sales and trading employees, as needed, all as described in Part II, Item 6(a)) have access to the database in order to run queries and generate reports of trading activity within ATS-1. Examples of such reports are</p>

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			<p>volume reports and cross price validation reports.</p> <p>- Use of System Entitlements: MS&Co assigns permissioned logins to access ATS-1 and other aspects of MS&Co's trading infrastructure. These permissioned logins serve as controls to protect confidential trading information, including confidential trading information of ATS-1. Relevant supervisors must approve all employee access to ATS-1 as well as other MS&Co systems with access to order and execution information. Access privileges are aligned to business function and designated reviewers evaluate access based upon the employee's current role. Access is revoked when no longer required or upon an employee's termination. An employee that previously had access to confidential trading information of ATS-1 will no longer have access to such information upon revocation. Additionally, pursuant to written supervisory procedures governing access to MS&Co NMS Stock ATSS, a supervisor conducts a quarterly review of access and entitlements relating to ATS-1. This review is designed to confirm that those with access should continue to have access and also addresses whether any individual has transferred roles such that he or she should no longer require access.</p> <p>- Application of Global Cyber Security Program: Morgan Stanley's global cyber security program, including measures designed to detect and prevent unauthorized intrusions to Morgan Stanley systems, apply to MS&Co's trading infrastructure, including ATS-1.</p> <p>- Use of Information Barriers: MS&Co maintains information barriers to separate employees and systems with access to confidential trading information of its NMS</p>

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			<p>Stock ATSS from those not permitted to access such information. These information barriers serve as controls to protect confidential trading information, including confidential trading information of ATS-1. Morgan Stanley maintains a network firewall and customer gateways that surround its trading infrastructure, including ATS-1, for security purposes. The firewall and customer gateways seek to protect access to confidential information of Morgan Stanley, including confidential trading information of ATS-1.</p> <p>- Personal Trading Policy and Restrictions: MS&Co prohibits all employees, including those with access to confidential trading information of ATS-1, from trading based on non-public or other confidential information, which would include confidential information of clients and, more specifically, confidential trading information in ATS-1. Pursuant to the Morgan Stanley Global Employee Trading, Investing, and Outside Business Activities Policy and a supplement to that policy governing the Global Sales and Trading Divisions including the Institutional Equity Division of MS&Co, employees (unless an exception is granted) must effect personal transactions in Employee Securities Account maintained at Morgan Stanley. Further, the Morgan Stanley Global Employee Trading Policy requires employees to seek pre-approval for purchases and sales of securities (unless the Global Employee Trading Policy or applicable supplement provides an exemption for a specific type of security, such as an ETF). In addition, employees generally must hold securities purchased in their Employee Securities Accounts for a minimum of 30 calendar days (or obtain pre-approval for such sale prior to 30 calendar days under exceptional circumstances.)</p>

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			<p>Employees are prohibited from effecting transactions that raise an actual or apparent conflict of interest with MS&Co or its clients or in securities on Morgan Stanley's Restricted List. Pursuant to applicable written policies and procedures, compliance and supervisory personnel, as applicable, review employee personal trading activity. Such reviews are designed to confirm compliance with MS&Co's policies regarding pre-approval, holding period, conflicts of interest (including trading based upon confidential trading information), and Restricted List compliance.</p> <p>- Morgan Stanley Code of Conduct: Morgan Stanley requires all employees to be bound by and observe its Code of Conduct, including provisions that address the handling of client information and impose a duty of confidentiality.</p>
Part III	Item 2	Eligibility for ATS Services	
Part III	Item 2b	<p>Are there any other conditions that the NMS Stock ATS requires a Person to satisfy before accessing the ATS services?</p> <p>If yes, list and provide a summary of the conditions.</p>	<p>Yes.</p> <p>ATS-1 cannot be accessed directly and can only be accessed indirectly via certain Morgan Stanley algorithms. <u>Any client of the Broker-Dealer Operator is eligible to access ATS-1.</u> Thus, if a Person meets the credit and counterparty risk and other onboarding standards and documentation applicable for clients and for access to such algorithms <u>of the Broker-Dealer Operator</u>, it can access ATS-1-. <u>See Part III, Item 5, for the ways in which a Subscriber can access ATS-1, both directly and indirectly through such algorithms.</u> Morgan Stanley's smart order routing technology does not access ATS-1.</p>
Part III	Item 4	Hours of Operation	

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Part III	Item 4a	Provide the days and hours of operation of the NMS Stock ATS, including the times when orders or trading interest can be entered on the ATS, and any hours of operation outside of regular trading hours.	<p>ATS-1 operates on regular business days during normal trading hours (9:30 a.m. to 4:00 p.m. eastern time, unless delayed, shortened, or otherwise modified by an exchangees). ATS-1 accepts orders beginning at 8 a.m. Eastern time but does not initiate a crossing round in an NMS stock until there is an execution for that NMS stock on the primary exchange.</p> <p>As an exception to this practice, the Broker-Dealer Operator may choose to operate ATS-1 during normal trading hours when the primary exchange is not operating if the Broker-Dealer Operator deems there to be sufficient liquidity in the marketplace in the applicable NMS stock. The Broker-Dealer Operator may suspend matching in ATS-1 during market hours under anomalous conditions. Examples of such conditions include market data issues, technology issues, or reporting issues, all with respect to either the Broker-Dealer Operator or the market generally.</p>
Part III	Item 5	Means of Entry	
Part III	Item 5a	<p>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)?</p> <p>If yes, explain the protocol that can be used to enter orders and trading interest.</p>	<p>No. Yes.</p> <p>Subscribers can enter orders or conditional indications via FIX directly into the trading infrastructure of the Broker-Dealer Operator. The standard version of FIX offered is FIX 4.2, although the Broker-Dealer Operator continues to support legacy FIX 4.0 and 4.1 sessions. Algorithmic trading products and order routing technology of the Broker-Dealer Operator, which are available for use by clients, traders, and sales traders, can enter orders or conditional indications into ATS-1 using FIX protocol.</p>
Part III	Item 5b	If yes to Item 5(a), are the protocols required to be identified in Item 5(a) the same for all	N/A No.

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		<p>Subscribers and the Broker-Dealer Operator?</p> <p>If no, identify and explain any differences.</p>	<p>The FIX protocol available to the Broker-Dealer Operator and affiliates is more extensive than the FIX protocol offered to non-affiliate Subscribers. The FIX protocol offered to the Broker-Dealer Operator and affiliates has additional FIX tags relevant to the nature of this order flow (e.g., tags relating to affiliate status to address self-trading or restrict other interactions).</p>
Part III	Item 5c	<p>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)?</p> <p>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 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 those means.</p>	<p>Yes.</p> <p>Participants can enter orders and conditional indications in ATS-1 via a number of front-end order management systems (OMSs), including third-party OMSs.</p> <p>Additionally, Conditional indications (and any orders resulting from such conditional indications) onlycan enter ATS-1 indirectly from certain Morgan Stanley algorithms. There are no other means for entering conditional indications or any orders resulting from such conditional indications. The terms and conditions for such entry are described in response to Part III, Item 9(a) (for conditional indications) and Item 7(a) (for orders resulting from conditional indications). Morgan Stanley algorithms that access ATS-1 communicate with ATS-1 via FIX connection. All Morgan Stanley algorithms access ATS-1 via the same FIX protocol.</p> <p>The Morgan Stanley algorithms that can enter conditional indications and resulting orders in the ATS-1 MSTX book (as described in Part III, Item 9(a)) are configured to do so by default setting. The MSTX book is designed for shorter duration orders. A client, business unit, or affiliate of the Broker-Dealer Operator can change this default setting with respect to its orders to be handled by such Morgan Stanley algorithm. That is, Participants can designate orders to be handled by Morgan Stanley algorithms not to interact with the MSTX book in</p>

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			<p>ATS-1. Such designation can be made on an order-by-order basis (for such orders to be handled by such algorithms), either by the Participant or by the Broker-Dealer Operator in response to a Participant's request, via FIX tag or as a default setting for that Participant set by the Broker-Dealer Operator at the Participant's request. Designations made on an order-by-order basis (for orders to be handled by such algorithms) are effective immediately with respect to that order to be handled by such algorithm if the Participant makes the designation. If the designation is made either on an order-by-order basis by the Broker-Dealer Operator in response to a Participant's request or as a default setting for that Participant, such designation will become effective once the requisite change can be made, which can vary in time.</p> <p><u>The Morgan Stanley algorithms that can enter conditional indications and resulting orders in the ATS-1 MSLC book (as described in Part III, Item 9(a)) are not configured to do so by default. The MSLC book is designed for longer duration orders. A client, business unit, or affiliate of the Broker-Dealer Operator can change this default setting with respect to its orders by notifying the Broker-Dealer Operator of such request. That is, Participants can designate orders to be handled by Morgan Stanley algorithms to interact with the MSLC book in ATS-1. Once a Subscriber has notified the Broker-Dealer Operator that it is electing to allow their algorithmic orders and conditional indications to interact with the MSLC book, the Subscriber can make such designation on an order-by-order basis, via FIX tag or as a default setting for that Subscriber set by the Broker-Dealer Operator at the Subscriber's request. Designations made on an order-by-order basis (for orders to be handled by such algorithms) are effective immediately with respect to that order to be handled by such algorithm.</u></p> <p><u>If the Subscriber requests this change for all of their algorithmic order flow by default, such designation</u></p>

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			will become effective once the requisite change can be made, which can vary in time.
Part III	Item 6	Connectivity and Co-Location	
Part III	Item 6a	<p>Does the NMS Stock ATS offer co-location and related services (e.g., cabinets and equipment, cross-connects)?</p> <p>If yes, provide a summary of the terms and conditions for co-location and related services, including the speed and connection (e.g. fiber, copper) options offered.</p>	<p>No. Yes.</p> <p>The Broker-Dealer Operator permits Subscribers to cross-connect directly to a FIX gateway for the trading infrastructure, which includes ATS-1, from servers located in the same data center as ATS-1. Such cross connect is provided by Equinix, Inc., the operator of the data center. A Subscriber's connection from its servers in the data center to the FIX gateway for ATS-1 can be via copper or fiber, and speed can range from 1 Gb to 10 Gb, with the 10 Gb connection having lower latency than the 1 Gb connection.</p>
Part III	Item 6b	<p>If yes to Item (6)(a), are the terms and conditions required to be identified in Item 6(a) the same for all Subscriber and the Broker-Dealer Operator?</p> <p>If no, identify and explain any differences.</p>	<p>N/A No.</p> <p>The Broker-Dealer Operator and certain of its affiliates connect to ATS-1 from within the network firewall and customer gateways that surround its trading infrastructure, including ATS-1, for security purposes, and Subscribers (excluding the affiliated Subscribers referenced above) connect from outside that firewall and customer gateways. The Broker-Dealer Operator and those affiliates that connect from within the firewall and customer gateways will be able to access ATS-1 faster as a result of not having to cross the firewall and pass through the customer gateways.</p>
Part III	Item 7	Order Types and Attributes	
Part III	Item 7a	Identify and explain each order type offered by the NMS Stock ATS. In your explanation, include the following:	ATS-1 initially pairs conditional indications. For context, please see the response to Part III, Item 9(a), which provides information regarding conditional indications, the operation of ATS-1, and

Part Number	Item Number	Question	Answer
		<p>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;</p> <p>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);</p> <p>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;</p> <p>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</p>	<p>the manner in which a conditional indication could result in an order in ATS-1.</p> <p>Orders can be entered in ATS-1 only in response to a firm-up request, which is issued for a specific buy and for a specific sell conditional indication only after those specific conditional indications have been paired. The process for pairing conditional indications (including relevant priority rules) is described more fully in the response to Part III, Item 11(a). Orders can be matched in ATS-1 only after their corresponding conditional indications have already been paired. Priority (including time priority) is therefore relevant only to conditional indications and not relevant to orders.</p> <p>As described in Part III, Item 9(a), each conditional indication expires when ATS-1 sends the firm-up request to the Morgan Stanley algorithm(s) <u>or Subscriber(s) or Broker-Dealer Operator for conditional indications entered directly into the ATS</u>, for each side of the bilateral pairing. If the Morgan Stanley algorithms(s), <u>Subscriber(s) or Broker-Dealer Operator</u> that entered both conditional indications that are the subject of a bilateral pairing do not respond to the firm-up request with a firm order, both conditional indications in the bilateral pairing will already have expired once the corresponding firm-up request was sent by ATS-1 and therefore will no longer exist for any subsequent pairing.</p> <p>Executions in ATS-1 are effected at a volume weighted average price (VWAP) over a designated time interval based upon reported trades and not at any price related to the best bid and offer, as described in response to Part III, Item 11(a). Thus, a change in the best bid and offer does not affect the interaction of orders that may be entered into ATS-1 in response to a firm-up request.</p> <p>One or more bilateral matches can conclude before the scheduled end time of that crossing round under</p>

Part Number	Item Number	Question	Answer
		<p>can operate in different ways, the default operation of the order type;</p> <p>v. whether an order type is eligible for routing to other Trading Centers;</p> <p>vi. the time-in-force instructions that can be used or not used with each order type;</p> <p>vii. the circumstance under which order types may be combined with another order type, modified, replaced, cancelled, rejected or removed from the NMS Stock ATS; and</p> <p>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.</p>	<p>certain circumstances, as described in response to Part III, Item 11(a).</p> <p><u>Subscribers and the Broker-Dealer Operator order management systems, order routing technology and algorithmic trading products can designate a conditional indication sent to the ATS-1 MSLC book (described in Part III, Item 7(a) and Item 9(a)) with a minimum fill quantity instruction. ATS-1 does not aggregate multiple contra-side orders to satisfy a minimum fill quantity on a single order. The minimum fill quantity constraint applies to every execution in ATS-1.</u></p> <p>Orders entered into ATS-1 in response to a firm-up request are market or limit day orders.</p> <p>ATS-1 does not route to other Trading Centers.</p> <p>Orders entered into ATS-1 in response to a firm-up request can be cancelled prior to execution. An order receives a new time stamp when it is entered into ATS-1 in response to a firm-up request.</p>
Part III	Item 8	Order Sizes	
Part III	Item 8a	<p>Does the NMS Stock ATS require minimum or maximum sizes for orders or trading interest?</p> <p>If yes, specify any minimum or maximum sizes for orders or trading interest.</p>	<p>Yes.</p> <p>As indicated above, certain Morgan Stanley algorithms initially enter conditional indications and only enter orders in response to a firm-up request.</p> <p>ATS-1 does not accept odd lot or mixed lot conditional indications or orders. As a result, the minimum size is a round lot.</p> <p>In addition, MS&Co has procedures reasonably designed to prevent the entry of orders that exceed pre-set credit or capital thresholds and the entry of erroneous orders by rejecting orders that exceed appropriate size parameters on an order-by-order basis or over a short period of time, as required by Rule 15c3-5 under the Securities Exchange Act of</p>

Part Number	Item Number	Question	Answer
			<p>1934, as amended, commonly known as the Market Access Rule.</p> <p><u>Additionally, although not required, a Participant can choose to provide a minimum fill quantity for a conditional indication in the MSLC book, as described in Part III, Item 7(a) and Item 9(a).</u></p>
Part III	Item 9	Conditional Orders and IOIs	
Part III	Item 9a	<p>Does the NMS Stock ATS send or receive any messages indicating trading interest (e.g., IOIs, actionable IOIs, or conditional orders)?</p> <p>If yes, identify and explain the use of the messages, including information contained in the 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).</p>	<p>Yes.</p> <p>ATS-1 accepts conditional indications from certain Morgan Stanley algorithms. <u>ATS-1 is a dark pool designed to provide matches over time intervals. ATS-1 executes at VWAP over the relevant time interval, as described in response to Part III, Item 11(a). ATS-1 accepts conditional indications from certain Morgan Stanley algorithms and from Subscribers and the Broker-Dealer Operator directly. ATS-1 maintains two continuous conditional books, one for Subscribers and the Broker-Dealer Operator entering conditional indications directly into ATS-1 and conditional indications entered by certain Morgan Stanley algorithms (the "MSLC" book) and a separate book for conditional indications entered solely by the Morgan Stanley algorithms (the "MSTX" book). The ATS-1 MSTX book is designed for conditional indications with a short duration trajectory (up to ten minutes) whereas the ATS-1 MSLC book is designed for conditional indications with a long duration trajectory (up to all day).</u></p> <p><u>If a user of the Morgan Stanley algorithms has designated their conditional indications and related orders to be eligible to participate in the MSLC book (as described in Part III, Item 5(c)), the applicable Morgan Stanley algorithm has the discretion to determine whether to place the conditional indication as eligible to match in the MSLC book, the MSTX book or place conditional indications in both books.</u></p>

Part Number	Item Number	Question	Answer
			<p>MSTX Book:</p> <p>Before explaining the use of conditional indications, it is necessary to provide background on the interaction between thosethe Morgan Stanley algorithms and ATS-1 and on the operation and structure of the ATS-1 MSTX book.</p> <p>ATS-1 is a dark pool designed to provide matches over time intervals for orders that certain Morgan Stanley algorithms handle. ATS-1 executes at VWAP over the relevant time interval, as described in response to Part III, Item 11(a).</p> <p>For context, Morgan Stanley offers certain algorithms that allow users to target certain trading benchmarks and other trading objectives. Those algorithms do so by generating a trading trajectory, which is a plan to trade certain amounts of a security over certain periods of time.</p> <p>The algorithm may then seek to trade all or a portion of the trading trajectory's planned trades in ATS-1. To do so, the algorithm will create a trajectory it is willing to enter in the ATS-1 MSTX book in the near term (up to ten minutes) and will communicate information relating to that near-term trajectory to ATS-1 in the form of a conditional indication. ATS-1 determines potential pairings of such conditional indications as described in further detail below and in response to Part III, Item 11(a). Note that the applicable algorithms determine the trading trajectory independent of ATS-1 and that ATS-1 does not alter any trading trajectory created by such algorithms.</p> <p>ATS-1 accepts conditional indications from certain Morgan Stanley algorithms that represent a non-firm willingness to trade. Each conditional indication indicates the number of shares willing to buy or sell over certain future time intervals that comprise potential durations of a crossing round. Specifically, a conditional indication will indicate the number of shares willing to buy (or sell) if a crossing round lasts one minute, the number of shares if a crossing</p>

Part Number	Item Number	Question	Answer
			<p>round lasts two minutes, and so on, up to if a crossing round lasts ten minutes. Conditional indications (including buy, sell, sell short, and sell short exempt conditional indications) can be at the market or designated with a limit price.</p> <p>ATS-1 evaluates, for conditional indications within the book on each side of the market, the number of shares willing to be paired in a crossing round of various potential durations and seeks to pair them on a bilateral basis. The primary consideration in the MSTX book for the duration of a crossing round is determining the longest period of time for which the greatest number of shares per minute can be paired. There can be at most one crossing round per security at any given point in time. The duration of a crossing round may vary from crossing round to crossing round and, regardless of duration, a crossing round will not exceed the end of regular trading hours. The duration of a crossing round is not security specific and will vary for each crossing round and each security, based upon the terms of the conditional indications to be paired, as described above.</p> <p>Upon selecting a crossing round duration, ATS-1 pairs conditional indications for such duration and then generates a bilateral firm-up request for each side of each pair to the Morgan Stanley algorithms that entered the paired conditional indications. Those algorithms can then send corresponding orders to ATS-1 that are firm. Each firm-up request contains ID numbers for each bilateral pairing, the size on which each conditional indication is being requested to firm-up, and the duration of the crossing round that will occur following the entry of firm orders in response to the firm-up request. Each conditional indication expires when ATS-1 sends the firm-up request to the Morgan Stanley algorithm(s) for each side of the bilateral pairing. Firm-up requests must be responded to within one second. ATS-1 may send multiple firm-up requests for an individual conditional indication as one message; however, each resulting order will correspond to a distinct contra-side pairing. Orders resulting from</p>

Part Number	Item Number	Question	Answer
			<p>paired conditional indications are matched in ATS-1 at a price equal to the interval VWAP over the crossing round, as described more fully in response to Part III, Item 11(a). If the Morgan Stanley algorithm or algorithms that entered both conditional indications that are the subject of a bilateral pairing do not respond to the firm-up request with a firm order, both conditional indications in the bilateral pairing will already have expired once the corresponding firm-up request was sent by ATS-1 and therefore will no longer exist for any subsequent pairing.</p> <p>A conditional indication entered in the ATS-1 MSTX book during an ongoing crossing round is eligible to participate in the next crossing round.</p> <p>MSLC Book:</p> <p>ATS-1 maintains a separate and distinct book for conditional indications entered directly into ATS-1 by either Subscribers, the Broker-Dealer Operator or certain Morgan Stanley algorithms that allow users to target certain trading benchmarks and other trading objectives. Those algorithms do so by generating a trading trajectory, which is a plan to trade certain amounts of a security over certain periods of time.</p> <p>The algorithm may then seek to trade all or a portion of the trading trajectory's planned trades in ATS-1 in the MSLC book and/or MSTX book. To do so, the algorithm will create a trajectory it is willing to enter in the book and will communicate information relating to that trajectory to ATS-1 in the form of a conditional indication designated either for the MSTX book or MSLC book. The ATS-1 MSLC book determines potential pairings of such conditional indications as described in further detail below and in response to Part III, Item 11(a). Note that the applicable algorithms, the Broker-Dealer Operator and/or Subscribers determine the trading trajectory independent of ATS-1 and that ATS-1</p>

Part Number	Item Number	Question	Answer
			<p><u>does not alter any trading trajectory created by such algorithms, Broker-Dealer Operator or Subscriber.</u></p> <p><u>The ATS-1 MSLC book accepts conditional indications from certain Morgan Stanley algorithms, the Broker-Dealer Operator and Subscribers that represent a non-firm willingness to trade. Each conditional indication indicates the number of shares willing to buy or sell over certain future time intervals that comprise potential durations of a crossing round. Specifically, a conditional indication in the MSLC book will indicate the number of shares willing to buy (or sell) if a crossing round lasts five minutes, the number of shares if a crossing round lasts ten minutes, and so on, up to if a crossing round lasts all day. Conditional indications (including buy, sell, sell short, and sell short exempt conditional indications) can be at the market or designated with a limit price.</u></p> <p><u>The ATS-1 MSLC book evaluates, for conditional indications within the book on each side of the market, the number of shares willing to be paired in a crossing round of various potential durations and seeks to pair them on a bilateral basis. There can be concurrent crossing rounds per security at any given point in time. The duration of a crossing round may vary from crossing round to crossing round and, regardless of duration, a crossing round will not exceed the end of regular trading hours. The duration of a crossing round is not security specific and will vary for each crossing round and each security, based upon the terms of the conditional indications to be paired, as described above.</u></p> <p><u>Upon selecting a crossing round duration, ATS-1 pairs conditional indications for such duration and then generates firm-up requests for each side of each pair. ATS-1 will send a firm-up request to the Subscriber(s), Broker-Dealer Operator or Morgan Stanley algorithm(s) that sent the conditional indication generating the conditional match. Depending upon the source of the applicable conditional indication, such firm-up request may be sent to the Subscriber, Broker-Dealer Operator</u></p>

Part Number	Item Number	Question	Answer
			<p><u>and/or to a Morgan Stanley algorithm, as applicable. Those algorithms, the Broker-Dealer Operator or Subscriber (where applicable) can then send corresponding orders to the ATS-1 MSLC book that are firm. Each firm-up request contains ID numbers for each bilateral pairing, the size on which each conditional indication is being requested to firm-up, and the duration of the crossing round that will occur following the entry of firm orders in response to the firm-up request. Each conditional indication expires when ATS-1 sends the firm-up request for each side of the bilateral pairing. Firm-up requests must be responded to within one second. Orders resulting from paired conditional indications are matched in ATS-1 at a price equal to the interval VWAP over the crossing round, as described more fully in response to Part III, Item 11(a). If the Morgan Stanley algorithm(s), Broker-Dealer Operator or the Subscriber(s) that entered both conditional indications that are the subject of a bilateral pairing do not respond to the firm-up request with a firm order, both conditional indications in the bilateral pairing will already have expired once the corresponding firm-up request was sent by ATS-1 and therefore will no longer exist for any subsequent pairing.</u></p> <p><u>The Broker-Dealer Operator monitors firm-up and cancellation rates for Subscribers whose conditional indications receive firm-up requests. If a Subscriber engages in a pattern of not timely responding to firm-up requests or cancelling orders, the Broker-Dealer Operator will take appropriate action, which could range from contacting the Subscriber to bring about a change in the Subscriber's behaviour or designating the Subscriber as no longer eligible as a Subscriber for ATS-1.</u></p> <p><u>A conditional indication entered in ATS-1 during an ongoing crossing round is eligible to participate in the next crossing round. Additionally, a conditional indication entered in the ATS-1 for participation in the MSTX book is ineligible to participate in a crossing round on the MSLC book and a conditional indication entered for potential matching in the</u></p>

Part Number	Item Number	Question	Answer
			MSLC book is ineligible to participate in a crossing round on the MSTX book.
Part III	Item 10	Opening and Reopening	
Part III	Item 10a	Explain how the NMS Stock ATS opens or re-opens for trading, including when and how orders and trading interest are priced, prioritized, matched, and executed, and identify any order types allowed prior to the start of regular trading hours or following a stoppage of trading in a security during regular trading hours.	ATS-1 accepts conditional indications pre-open as a technical matter, but pairing does not occur until ATS-1 has received conditional indications to buy and to sell that can be paired and there has been an execution for the subject NMS stock on the primary exchange. ATS-1 will not execute a transaction in an NMS stock unless there has been a sufficient number of transactions reported to the consolidated tape in the subject NMS stock for the Broker-Dealer Operator to calculate a price that it determines is sufficiently representative of interval VWAP. ATS-1 generally does not receive pre-open conditional indications, as the Morgan Stanley algorithms that send conditional indications are designed not to send conditional indications to ATS-1 pre-open. ATS-1 does not execute pre-open.
Part III	Item 11	Trading Services, Facilities and Rules	
Part III	Item 11a	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.	<p>ATS-1 is a dark pool designed to provide matches over time intervals for orders that certain Morgan Stanley algorithms handle. ATS-1 executes at VWAP over a relevant time interval. ATS-1 enables the Broker-Dealer Operator to match client, affiliate, and principal orders for NMS stocks with other client, affiliate, and principal orders.</p> <p>ATS-1 receives conditional indications from certain Morgan Stanley algorithms and directly from Subscribers and the Broker-Dealer Operator, as described in response to Part III, Item 9(a). ATS-1 seeks to pair on a bilateral basis conditional indications to buy with conditional indications to sell. Once two or more conditional indications are paired, ATS-1 will initiate a crossing round within</p>

Part Number	Item Number	Question	Answer
			<p>the book in which the paired conditional indications reside.</p> <p>ATS-1 ATS-1 maintains two continuous conditional books. The ATS-1 MSLC book accepts conditional indications from Subscribers and the Broker-Dealer Operator entering such conditional indications directly into ATS-1 as well as conditional indications entered by certain Morgan Stanley algorithms. ATS-1 maintains a separate book, MSTX, for conditional indications entered exclusively by the Morgan Stanley algorithms. The ATS-1 MSTX book is designed for conditional indications with a short duration trajectory whereas the ATS-1 MSLC book is designed for conditional indications with a long duration trajectory.</p> <p>If a user of the Morgan Stanley algorithms has designated their orders to be eligible to match in the MSLC book (as described in Part III, Item 5(c)), the applicable Morgan Stanley algorithm has the discretion to determine whether to place the conditional order into the MSLC book, the MSTX book or both.</p> <p>MSTX Book:</p> <p>The ATS-1 MSTX book is designed for orders with a shorter trading trajectory and can be accessed solely through certain Morgan Stanley algorithms. The ATS-1 MSTX book employs capacity/size/time matching priority when seeking to pair conditional indications on a bilateral basis. A conditional indication that ATS-1 receives for an account of an affiliate of the Broker-Dealer Operator on behalf of that affiliate's client(s) is classified as an agency conditional indication. A conditional indication that ATS-1 receives for an account of an affiliate trading for the affiliate's own account for the affiliate's client facilitation/market making activity (which the Broker-Dealer Operator handles as agent for its affiliate) yields priority to other agency conditional indications (and is classified as an agency conditional indication for counterparty selection/opt-out purposes as described in response to Part II, Item</p>

Part Number	Item Number	Question	Answer
			<p>3). A conditional indication that ATS-1 receives for an account of an affiliate and for that affiliate's own account other than for the affiliate's client facilitation/market making activity is deemed a principal conditional indication for priority and for counterparty selection/opt-out purposes, notwithstanding that the Broker-Dealer Operator's capacity otherwise would be as agent for its affiliate.</p> <p>Each conditional indication indicates the number of shares willing to buy or sell over certain future time intervals that comprise potential durations of a crossing round. Specifically, a conditional indication will indicate the number of shares willing to buy (or sell) if a crossing round lasts one minute, the number of shares if a crossing round lasts two minutes, and so on, up to if a crossing round lasts ten minutes. ATS-1 evaluates, for conditional indications on each side of the market, the number of shares willing to be paired in a crossing round of various potential durations and seeks to pair them on a bilateral basis. The primary consideration for choosing the duration of a crossing round is determining the longest period of time for which the greatest number of shares per minute can be paired. There can be at most one crossing round per security within the MSTX book at any given point in time. The duration of a crossing round may vary from crossing round to crossing round and, regardless of duration, a crossing round will not exceed the end of regular trading hours. The duration of a crossing round is not security specific and will vary for each crossing round and each security, based upon the terms of the conditional indications to be paired, as described above.</p> <p>Upon selecting a crossing round duration, the ATS-1 MSTX book pairs conditional indications for such duration and issues firm-up requests to the Morgan Stanley algorithms that entered those conditional indications. ATS-1 matches on a bilateral basis orders entered in response to such firm-up requests for the duration of the crossing round. Such match</p>

Part Number	Item Number	Question	Answer
			<p>occurs at the interval VWAP over the crossing round, as described in more detail below.</p> <p>One or more bilateral matches can conclude before the scheduled end time of that crossing round under certain circumstances. For example, if an order is cancelled during the crossing round, that may result in a partial match or no match for that pairing. Also, ATS-1 evaluates the marketability of limit orders with respect to the price quoted for the security in the consolidated quotation system and a limit order received following a firm-up request that is the subject of a pairing could become non-marketable during a crossing round, resulting in a partial match or no match for the pairing.</p> <p>Given the forward-looking nature of the crossing rounds, the ATS-1 MSTX book makes certain assumptions regarding forward-looking volume and price when determining quantity eligible for pairing for each crossing round. As a result, conditional indications (or portions thereof) that may otherwise be eligible to be paired in the ATS-1 MSTX book may not be paired in a crossing round. For example, where a conditional indication with a limit order is priced close to the then-current market for the subject NMS stock (such that, for example, the limit order could become non-marketable during the forward looking crossing round), ATS-1 may not consider all or a portion of the conditional indication as eligible for the crossing round. This applies without regard to the capacity of the conditional indication.</p> <p>Executions in ATS-1 occur at an interval VWAP calculated by ATS-1 based on the average price for each NMS stock weighted by the volume of shares executed in that NMS stock that were reported to the consolidated tape during the crossing round (or such shorter period for an early termination). Such calculation is subject to certain conditions designed to avoid calculating prices that may be less representative of interval VWAP.</p>

Part Number	Item Number	Question	Answer
			<p><u>MSLC Book:</u></p> <p><u>ATS-1 maintains the MSLC book which is designed for longer duration orders that can be accessed directly by Subscribers of the ATS and the Broker-Dealer Operator or through certain Morgan Stanley algorithms. The ATS-1 MSLC book employs capacity/marketability/duration/size/time priority when seeking to pair conditional indications on a bilateral basis.</u></p> <p><u>Capacity: Priority is given to conditional indications placed on an agency basis. A conditional indication that ATS-1 receives for an account of an affiliate of the Broker-Dealer Operator on behalf of that affiliate's client(s) is classified as an agency conditional indication. A conditional indication that ATS-1 receives for an account of an affiliate trading for the affiliate's own account for the affiliate's client facilitation/market making activity (which the Broker-Dealer Operator handles as agent for its affiliate) yields priority to other agency conditional indications (and is classified as an agency conditional indication for counterparty selection/opt-out purposes as described in response to Part II, Item 3). A conditional indication that ATS-1 receives for an account of an affiliate and for that affiliate's own account other than for the affiliate's client facilitation/market making activity is deemed a principal conditional indication for priority and for counterparty selection/opt-out purposes, notwithstanding that the Broker-Dealer Operator's capacity otherwise would be as agent for its affiliate.</u></p> <p><u>Marketability: A conditional indication will be given a marketability category based on the price, and relative volatility of the security. Note that conditional indications can be in the same marketability category, even if the conditional indications have different prices.</u></p> <p><u>Duration: The ATS-1 MSLC book will give priority to conditional indications that can match for the longest duration. For instance, a 15-minute crossing</u></p>

Part Number	Item Number	Question	Answer
			<p><u>round has higher priority than a 10-minute crossing round.</u></p> <p><u>Size: Conditional indications with the greater number of shares will be prioritized over conditional indications with a smaller number of shares.</u></p> <p><u>Each conditional indication indicates the number of shares willing to buy or sell over certain future time intervals that comprise potential durations of a crossing round. Specifically, a conditional indication will indicate the number of shares willing to buy (or sell) if a crossing round lasts five minutes, the number of shares if a crossing round lasts ten minutes, and so on, up to if a crossing round lasts all day. ATS-1 evaluates, for conditional indications on each side of the market within the book, the number of shares willing to be paired in a crossing round of various potential durations and seeks to pair them on a bilateral basis. There can be concurrent crossing rounds per security at any given point in time in the MSLC book. The duration of a crossing round may vary from crossing round to crossing round and, regardless of duration, a crossing round will not exceed the end of regular trading hours. The duration of a crossing round is not security specific and will vary for each crossing round and each security, based upon the terms of the conditional indications to be paired, as described above.</u></p> <p><u>Upon selecting a crossing round duration, ATS-1 pairs conditional indications for such duration and then generates firm-up requests for each side of each pair. ATS-1 will send a firm-up request to the Subscriber(s), the Broker-Dealer Operator or Morgan Stanley algorithm(s) that sent the conditional indication generating the conditional match. Depending upon the source of the applicable conditional indication, such firm-up request may be sent to the Subscriber(s), the Broker-Dealer Operator or to a Morgan Stanley algorithm(s), as applicable. Those algorithms, the Broker-Dealer Operator or Subscriber(s) (where applicable) can then send corresponding orders to the ATS-1 MSLC book that are firm. ATS-1 matches on a bilateral</u></p>

Part Number	Item Number	Question	Answer
			<p><u>basis orders entered in response to such firm-up requests for the duration of the crossing round. Such match occurs at the interval VWAP over the crossing round, as described in more detail below.</u></p> <p><u>One or more bilateral matches can conclude before the scheduled end time of that crossing round under certain circumstances. For example, if an order is cancelled during the crossing round, that may result in a partial match or no match for that pairing. Also, ATS-1 evaluates the marketability of limit orders with respect to the price quoted for the security in the consolidated quotation system and a limit order received following a firm-up request that is the subject of a pairing could become non-marketable during a crossing round, resulting in a partial match or no match for the pairing.</u></p> <p><u>Executions in ATS-1 occur at an interval VWAP calculated by ATS-1 based on the average price for each NMS stock weighted by the volume of shares executed in that NMS stock that were reported to the consolidated tape during the crossing round (or such shorter period for an early termination). Such calculation is subject to certain conditions designed to avoid calculating prices that may be less representative of interval VWAP.</u></p>
Part III	Item 11c	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.	<p>ATS-1 operates pursuant to the process described in response to Part III, Item 11(a), with interaction subject to the priority rules described in that response and the handling of conditional indications as described in response to Part III, Item 9(a). Orders and conditional indications are also subject to the Counter-Party Selection procedures described in response to Part III, Item 14(a) and Part II, Item 3. As described in those sections, ATS-1 permits the users of the Morgan Stanley algorithms that can indirectly enter conditional indications and resulting orders in ATS-1 <u>and direct Participants of ATS-1</u> to opt out of interacting with conditional indications deemed principal conditional indications in ATS-1, as described in Part III, Item 11(a). By opting out of interacting with principal conditional indications, a</p>

Part Number	Item Number	Question	Answer
			<p>Participant inherently opts out of interacting with principal orders.</p> <p>ATS-1 accepts short sale conditional indications and short sale exempt <u>orders and</u> conditional indications and the Broker-Dealer Operator handles any orders resulting from such conditional indications following a firm-up request pursuant to the policies and procedures adopted pursuant to Rule 201(b) of Regulation SHO.</p> <p>ATS-1 executes at the interval VWAP over the duration of the crossing round and not at a price determined with respect to the best bid and offer for an NMS stock. As a result, ATS-1 will continue to execute in a locked or crossed market.</p> <p>In the event of an error of ATS-1 or of the Broker-Dealer Operator, the Broker-Dealer Operator will bust the trade or handle the liquidation or covering of the error position in a Morgan Stanley error account.</p> <p>A conditional indication and an order each receives a new time stamp when it enters ATS-1. Conditional indications can be amended and will retain their time priority. Amending an order has the same effect as cancelling the order. Conditional indications and orders (and executions of such orders) are timestamped with microsecond granularity.</p>
Part III	Item 14	Counterparty Selection	
Part III	Item 14a	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)?	<p>Yes.</p> <p>ATS-1 permits the users of the Morgan Stanley algorithms that can indirectly enter conditional</p>

Part Number	Item Number	Question	Answer
		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.	<p>indications and resulting orders in ATS-1 and direct Participants of ATS-1 to opt out of interacting with conditional indications deemed principal conditional indications in ATS-1, as described in Part III, Item 11(a). By opting out of interacting with principal conditional indications, a Participant inherently opts out of interacting with principal orders.</p> <p>In addition, conditional indications may be designated (i) not to interact with certain conditional indications to comply with regulatory requirements (such as requirements under ERISA for applicable accounts relating to principal and agency crosses) and (ii) not to pair with conditional indications from the same Participant (where crossing may otherwise be permitted). Such designations can be made on an individual conditional indication basis for conditional indications identified by the Participant or as a default setting for all conditional indications of that Participant set by the Broker-Dealer Operator at the Participant's request. There is no need to opt out of interacting with orders, as order matching occurs only as a consequence of conditional indication pairing and such pairing will be subject to the opt out provisions for conditional indications. Designations that a Participant makes on an individual conditional indication basis are effective immediately with respect to that conditional indication. Designations to change a default setting become effective once the requisite change can be made, which can vary in time.</p>
Part III	Item 15	Display	
Part III	Item 15b	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	<p>Yes.</p> <p>Each conditional indication that is the subject of a bilateral pairing will generate a firm-up request to the Morgan Stanley algorithm-or algorithms(s), the Broker-Dealer Operator or Subscriber(s) that generated the conditional indications. While again</p>

Part Number	Item Number	Question	Answer
		<p>NMS Stock ATS who are operating the system)?</p> <p>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 the orders and trading interest is displayed, and the functionality of the Broker-Dealer Operator and types of market participants that receive the displayed information.</p>	<p>not a display for purposes of the display requirement of Rule 301(b)(3) of Regulation ATS, this firm-up request will "make known to" the algorithm, Broker-Dealer Operator or Subscriber that generated the conditional indication the fact that there is potential contra-side interest in ATS-1 and the size on which the algorithm is being requested to firm up. The firm-up request is sent only to the Morgan Stanley algorithm, Broker-Dealer Operator and/or Subscriber that generated the conditional indication resulting in the bilateral conditional pairing.</p>
Part III	Item 15c	<p>If yes to Item 15(b), are the display procedures required to be identified in Item 15(b) the same for all Subscribers and the Broker-Dealer Operator?</p>	<p>No.</p> <p>As indicated above, the firm-up request is sent only to the Morgan Stanley algorithm that generated the conditional indication resulting in the bilateral conditional pairing. Yes.</p>
Part III	Item 19	Fees	
Part III	Item 19b	<p>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.</p>	<p>The Broker-Dealer Operator negotiates commission rates (and, where applicable, financing rates) with clients that cover all of the broker-dealer services provided to that client, which could include access to ATS-1. Such services may include high-touch trading services, low-touch trading services, financing services, and access to research. The negotiation process is the same even when the only services the client seeks to access are certain Morgan Stanley algorithms that could access ATS-1 is ATS-1. Commission rates range from zero cents per share to 5% of the value of the transaction in ATS-1, although commission amounts have exceeded such rates under very limited circumstances based on the nature of the transaction. In addition, certain clients may negotiate a commission rate under which the client agrees to pay the fees and receive the rebates of venues to which the client's orders were routed and that result</p>

Part Number	Item Number	Question	Answer
			from removing or providing liquidity on those venues. At times, the amount of rebates that a client receives may exceed the amount charged, which could result a net rebate to such client irrespective of the negotiated commission rate.