

J.P. MORGAN SECURITIES LLC – JPM-X

Frequently Asked Questions – US

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Preface

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JPM-X – Alternative Trading System (ATS)

1. Does JPMS operate an ATS?

Yes. JPMS operates two alternative trading systems, JPM-X and JPB-X. These FAQs relate to JPM-X.

2. Where can I locate the Form ATS-N for JPM-X?

The Form ATS-N for JPM-X is available on the SEC’s website at the following link:
<https://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&filenum=013-00110>.

3. Can clients opt out of JPM-X?

Yes. As with any non-protected venue under Regulation NMS, clients may opt out of executing within JPM-X by instructing their JPMS representative.

4. What order types and attributes does JPM-X accept?

JPM-X accepts non-peg limit, primary peg, midpoint peg, and market peg orders. Peg orders may also have a limit price. JPM-X supports DAY and IOC time-in-force instructions on orders.

5. What conditional order types and attributes does JPM-X accept?

JPM-X accepts non-peg limit, primary peg, midpoint peg, and market peg conditional orders. Peg conditional orders may also have a limit price. JPM-X supports only DAY time-in-force instructions on conditional orders.

6. Does JPM-X receive or send indications of interest?

JPM-X does not receive indications of interest.

JPM-X will continuously make known, on a real-time basis, the available resting firm orders of the JPM-X order book to the SOR. For resting firm liquidity (i.e. Day orders only), the symbol, price, side, quantity, order type (e.g., market vs limit and peg instructions), assigned segmentation tier, counter-party preference, and minimum quantity attributes will be provided from JPM-X to the SOR ("Order Information"). Amongst other things, the SOR will not receive information concerning the Subscriber's identity. Subscribers accessing JPM-X cannot opt-out of the inclusion of their Order Information in the feed. The SOR uses this information solely to decide whether to route firm orders to JPM-X and does not share the information with any other trading system or desk.

7. What order priority is used to determine a match within JPM-X?

Once JPM-X determines that an order is eligible for execution, it is crossed with other eligible order(s) on the opposite side of the market based on price/tier/time priority (e.g., at a given price level, Tier 1 orders, regardless of order capacity, have higher priority than Tier 2 orders, and at a given price level within the same tier, orders received earlier in time have higher priority than orders received later in time). With respect to orders and conditional orders at the same price, orders always have priority over conditional orders irrespective of their tier or when they were received by JPM-X.

8. Please explain the JPM-X matching logic.

When crossing two orders matched for execution, JPM-X executes at or within their effective limit prices. For marketable limit orders, the effective limit price is the NBBO inside offer for buy orders and the NBBO inside bid for sell orders. For peg orders, the effective limit price is the better of the limit price specified on the order, if any, and the price defined by the peg instruction. (For example, for a midpoint peg order with a limit price, the effective limit price is the better of the order's limit price and the NBBO midpoint.) If the effective limit prices of two orders overlap, the orders will cross within, or at one of, the effective limit prices.

Note that JPM-X does not execute a cross if the inside quotation of the NBBO is crossed (i.e., the inside bid exceeds the inside offer) or locked (i.e., the inside bid is equal to the inside offer). JPM-X also does not execute a cross in any NMS stock that is subject to a regulatory or trading halt.

In looking for crossing opportunities, JPM-X complies with any applicable participation instruction associated with each order. All orders, once found eligible for crossing, are executed by JPM-X on the basis of price/tier/time priority as described in FAQ 7.

In addition, when a circuit breaker has been triggered for an NMS stock under Rule 201 of Regulation SHO and JPM-X has matched a short sale order for execution, JPM-X will only execute at a price that is above the NBBO inside bid.

9. Please provide details regarding the participants that contribute to JPM-X's liquidity.

The participants in JPM-X include internal trading desks, affiliates, and clients of JPMS. These clients include issuers, investment companies, banks, asset managers, hedge funds, brokers, dealers, market makers, principal trading firms, governments, and sovereign wealth funds.

10. Does JPM-X internalize client order flow against JPMS' principal and proprietary flow? Can clients opt out of principal and proprietary order flow?

Client orders may be internalized against principal order flow. Clients are able to opt out of interacting with principal order flow types (see FAQ 14). It is against JPMS policy to engage in proprietary trading activity that JPMS believes would be prohibited under the Volcker Rule (Section 13 of the Bank Holding Company Act of 1956 and the associated rules and regulations). Note, however, that JPMS' understanding and application of the Volcker Rule may evolve over time.

11. Do any JPMS-affiliated entities access JPM-X?

JPMS' algorithms/SOR may route orders and conditional orders from affiliates of JPMS to JPM-X for execution.

12. How do clients access JPM-X?

JPMS' clients, affiliates, and internal traders can access JPM-X through JPMS' algorithms/SOR. JPMS' clients also can access JPM-X directly by routing through JPMS' JISU technology, a low-latency platform accessible through a standard FIX messaging protocol (FIX 4.2 API).

13. Please explain JPMS' monitoring of JPM-X.

During the course of a trading day, JPMS personnel monitor various JPM-X parameters, including, for example, burst rates, order and cancellation rates, and other criteria, to better assure that JPM-X is operating appropriately. In addition, on a post-trade basis, JPMS personnel review reports and other information designed to detect certain trading behavior that may affect JPM-X. JPMS may take action based on the results of these reviews.

14. Does JPM-X offer segmentation and allow participants to opt out of interaction with certain flow?

Participants' orders and conditional orders is assigned to an order flow type, each of which corresponds to a tier used for purposes of determining priority (given JPM-X's use of price/tier/time priority as described above). JPMS assigns order flow types based upon a review of information received from the participant at onboarding and order characteristics received (e.g., for Tier 4 and Tier 5, based upon the order capacity of the order). The order flow types and corresponding tiers are provided below. For the avoidance of doubt, "institutional investor client flow" and "broker-dealer client flow" do not include JPMS principal flow or JPMS affiliates' principal flow. JPMS principal flow in Tier 3 may also include JPMS executing principally for clients on a riskless principal basis.

Tier 1 - Comprised of the following flows, each of which access JPM-X via JPMS algorithms/SOR and where the algorithms/SOR makes a determination related to venue or price: (i) institutional investor client order flow and broker-dealer client order flow received by JPMS or JPMS's affiliates and handled on an agency basis; (ii) JPMS principal flow originating from the Equity Finance Trading desk and designated as hedging low-touch and no-touch client security-based swaps activity; and (iii) JPMS principal flow facilitating agency orders designated as non-standard settlement through JPMS's Electronic Client Solutions Trading desk;

Tier 2 - Order flow of institutional investors and non-U.S.-registered broker-dealers received by JPMS or JPMS's affiliates and handled on an agency basis and routed directly to JPM-X via direct access or using directed orders through the algorithms/SOR (i.e., where the algorithms/SOR do not make a determination related to venue or price);

Tier 3 - Principal order flow of JPMS and JPMS's affiliates (excluding principal order flows identified in Tier 1 above), that access JPM-X via JPMS algorithms/SOR and where the algorithms/SOR make a determination related to venue or price;

Tier 4 - Order flow of U.S.-registered broker-dealers, received by JPMS with an order capacity designation of agency, and routed directly to JPM-X via direct access or using directed orders through the algorithms/SOR (i.e., where the algorithms/SOR do not make a determination related to venue or price); and

Tier 5 - Order flow of U.S.-registered broker-dealers, received by JPMS with an order capacity designation of principal, and routed directly to JPM-X via direct access or using directed orders through the algorithms/SOR (i.e., where the algorithms/SOR do not make a determination related to venue or price).

Participants can restrict the order flow types or tiers with which their orders and/or conditional orders interact. Participants can identify order flow type or tier restrictions (i) on an order-by-order basis in the order or conditional order instructions submitted to JPMS or (ii) by contacting the participant's JPMS representative with respect to a subset of orders and/or conditional orders or all order flow. JPMS may further limit the order flow types or tiers with which a participant's orders and/or conditional orders interact based on the participant's trading objectives, consistent with the participant's order instructions (e.g., when a participant has informed JPMS that the participant seeks a low participation rate and so JPMS, in light of that objective, reduces the liquidity available to the participant in JPM-X by restricting the order flow tiers with which the participant's orders and/or conditional orders would interact). In addition, JPMS can apply self-crossing restrictions and may consult with the participant in determining such restrictions.

Restrictions or preferences participants may have requested with respect to agency conditional orders or orders may not necessarily apply to conditional orders or orders handled by JPMS on a riskless principal basis. Such conditional orders or orders may be assigned to an order flow type for internal (JPMS) flow rather than client flow in JPM-X. If you have any questions about the manner in which your conditional orders or orders are handled by JPMS, please contact your JPMS sales representative.

For further details regarding the differences between JPM-X's current and prior tiering structure (pre-August 5th, 2024), please see the following link: [Summary of Differences](#).

15. What market data feeds are used by JPM-X?

JPMS determines the NBBO and protected quotes and executes transactions in JPM-X based on market data received from direct feeds or, in the case of any market data for the Long-Term Stock Exchange and the ADF, Securities Information Processors (the "SIP"). In the event of any disruption of services or other issues with any of the direct feeds, JPMS reserves the right to execute transactions in JPM-X based on market data from the SIP for any (or all) market center(s). JPMS may suspend trading in an NMS stock if the market data received by JPM-X for the stock from the SIP is unavailable, unstable, experiencing unacceptable latencies, or detected to be providing quotes that appear to have quality issues. The list of market centers for which JPMS receives market data from direct feeds may change from time to time.

16. How are odd lots taken into account when determining the NBBO based on price information across exchange feeds?

JPM-X refers to a combination of direct feeds and the SIP to calculate the NBBO. If the direct feed received from an exchange includes odd lot quotes, JPM-X considers the best price at which the exchange's odd lot quotes would be aggregated and published to the SIP to be that exchange's protected quote for purposes of determining the NBBO.

17. What is JPMS' expected behavior in the event of a disruption in the ability to trade report to a FINRA trade reporting facility?

Upon determining that JPMS' ability to report to a FINRA trade reporting facility has been compromised, the Firm may take steps to limit impact by ceasing to execute trades in JPM-X.

JPMS will endeavor to notify clients that access JPM-X directly of the Firm's response to such FINRA trade reporting facility systems issues as appropriate.

18. Does JPMS allow clients to co-locate with JPM-X?

Clients that seek to increase the speed of their communication with JPM-X can choose to route orders and conditional orders directly to JPM-X via JPMS' JISU platform rather than having orders and conditional orders routed to JPM-X on their behalf via the algorithms/SOR. U.S.-registered broker-dealer Subscribers access JISU via a 10 GB/sec fiber cross-connect between the hardware of Lucera, a third-party connectivity provider, and JISU.. All other clients can access JISU either via a 10GB/sec fiber cross-connect between the hardware of Lucera and JISU, or via the following direct cross-connects to JISU: (a) 1 GB/sec fiber, (b) 10GB/sec fiber, or (c) copper. Clients also can contract directly with Equinix to be located in the Equinix NY4 New York IBX Data Center, the same data center in which the JPMS trading algorithms, SOR, JISU, and JPM-X are located. Clients, however, cannot share the same rack space with the JPMS trading algorithms, SOR, JISU, and JPM-X. Clients, irrespective of their location, can, but are not required to, access JISU.

19. Does JPMS allow electronic liquidity providers to enter orders into JPM-X?

Yes. Electronic liquidity providers are permitted to enter orders in JPM-X, as described in FAQ 14.

20. Can we opt out of trading with electronic liquidity providers?

Yes, though while JPM-X does not have an explicit electronic liquidity providers tier, clients may opt-out of interacting with order flow of U.S.-registered broker-dealers, received by JPMS with an order capacity designation of principal. See FAQ 14 for further details.

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