

## **A. List of order types**

The H2O ATS has the following order types:

- LNI resting orders
- IOC orders transmitted by liquidity partners (“LPs”)
- Resting orders transmitted by LPs
- Accepts by Members in response to notification of a broker block opportunity (referred to as “broker block accepts”).

Participants of LNI consist of Members, customers and LPs. Participants can transmit various types of parent orders to LNI. Based on these parent orders, LNI can transmit LNI resting orders to the H2O ATS. LNI resting orders are child orders of the participant’s parent order.

The following are the types of parent orders:

- Algo orders
- Liquidnet-only orders
- LN auto-ex orders
- Automated negotiation orders
- Manual targeted invitations.

## **B. Background information and definitions**

This section provides background information and definitions that apply to one or more of the order types listed above and described below.

### **(i) Positive action rate**

“Positive action” means going active on a match, sending an invite to a contra or creating an algo, Liquidnet-only, LN auto-ex, automated negotiation or manual targeted invitation order. “Positive action rate” (PAR) is the percentage of matched symbols where a party takes a positive action. For information regarding matches and invites, please refer to the Form ATS-N for the Negotiation ATS.

### **(ii) Mid-peg instructions; price constraints**

#### ***General***

The H2O ATS provides for mid-price executions in certain situations, as described below.

#### ***Mid-price***

“Mid-price” means the mid-point between the highest displayed bid price and lowest displayed ask price in the US market at the time of execution. LNI determines the best bid and best ask by reference to the applicable market data feed sourced by LNI, as described in the response to Item 23 of this Part III.

If the spread is one cent, the mid-price is ½ cent above the best bid and below the best ask. If the spread is zero cents, the mid-price is the best bid/best ask. If the spread is negative (i.e., the best bid is higher than the best ask) or zero (i.e., the best bid equals the best offer), the H2O ATS will not execute the order.

### ***Price constraint***

On any order, a user can provide a fixed limit price. If a user only provides a mid-peg instruction, the user’s price constraint is the mid-price. If a user provides a fixed limit price for an order and a mid-peg instruction also applies, the price constraint of the order is as follows:

- ***Buy order.*** Lower of the limit price of the order and the mid-price
- ***Sell order.*** Higher of the limit price of the order and the mid-price.

The price constraint of an order can vary over time based on changes in the mid-price. When transmitting an LNI resting order to the H2O ATS, LNI complies with any price constraints of the parent order.

## **C. Interaction of H2O order types**

### **(i) LNI resting orders**

LNI can transmit all or a portion of any Liquidnet algo, Liquidnet-only, LN auto-ex, automated negotiation or manual targeted invitation to the H2O ATS. LNI handles these child orders as LNI resting orders, as described in this Form ATS-N filing.

### **(ii) Execution, cancellation and editing of LNI resting orders**

An LNI resting order can execute against any other order in the H2O ATS. An LNI resting order only executes in the H2O ATS if the execution price is within the price constraints of the LNI resting order and the contra order.

The H2O ATS only executes orders in round lots.

The quantity of any execution is the lesser of the quantity of the two contra orders (but rounded down to the highest round lot).

All LNI resting orders in the H2O ATS are resting orders and are automatically cancelled at the close of trading of the regular session of the applicable exchange (on or shortly after 4 pm). Traders should monitor open orders during the trading day and request cancellations (or edits) as appropriate.

The H2O ATS can execute an order in a stock when the primary market has opened.

### **(iii) Liquidity partners; LP IOC orders**

#### ***General***

Liquidity partners (LPs) do not have access to the Liquidnet desktop application.

LPs have the ability to transmit IOC or resting orders to the H2O ATS.

For each LP IOC order, the LP must specify the security, side (buy or sell) and quantity.

An LP also can specify the limit price of an LP IOC order. If no limit price is specified for an LP IOC order, the H2O ATS imputes the following limit price:

- Current best bid (in the case of an LP IOC sell order)
- Current best ask (in the case of an LP IOC buy order).

The system only executes LP IOC orders at or below the mid-price in the case of an LP IOC sell order and at or above the mid-price in the case of an LP IOC buy order.

LP IOC orders are not displayed. LP IOC orders are all IOC (immediate or cancel).

### **(iv) LP resting orders**

#### ***General***

LPs also can transmit resting orders to the H2O ATS.

For each resting order, the LP must specify the security, side (buy or sell) and quantity. An LP also can specify the limit price of an LP resting order. If no limit price is specified for an LP resting order, the H2O ATS imputes the following limit price:

- Current best bid (in the case of an LP resting sell order)
- Current best ask (in the case of an LP resting buy order).

By default, the system only executes LP resting orders at or below the mid-price in the case of an LP resting sell order and at or above the mid-price in the case of an LP resting buy order, except that an LP can override this default upon request to LNI.

All LP resting orders are automatically canceled at the close of trading. An LP can cancel a resting order at any time.

#### ***Minimum order size***

The minimum order size for LP resting orders is 100 shares.

#### ***Conditional orders from LPs***

LPs can transmit resting orders on a conditional basis. This functionality, which is fully automated from the point at which the LP transmits the conditional order to LNI, allows the LP to rest actionable order flow in the H2O ATS that may include shares already placed at other trading venues. These orders are considered “conditional” since the LP will commit the order only prior to execution with a matched contra order. Prior to executing a conditional order, LNI sends a request to the LP’s system to commit the shares on the order, and the LP’s system responds by sending remaining unexecuted shares to LNI (known as a “firm-up”). This firm-up request is used to protect the LP against over-execution. LP firm-up rates are periodically reviewed by Liquidnet Sales, with appropriate follow-up to the LP to address any issues.

#### **(v) Execution of LP orders**

##### ***Contrast to an LP order***

An LP IOC order can execute against an LNI resting order or an LP resting order.

An LP resting order can execute against any other order in the H2O ATS, except that under certain circumstances as described in this Form ATS-N filing, LP orders only interact with LNI resting orders and broker block accepts to the extent that the Member or customer has elected to interact with LP orders.

##### ***Execution quantity***

The H2O ATS only executes LP orders in round lots.

The quantity of any execution is the lesser of the quantity of the matching buy and sell orders, subject to any applicable minimum quantity (and rounded down to the highest round lot).

#### **(vi) Execution price**

The execution price for trades in the H2O ATS is determined as follows:

- If both sides are able to trade at the mid-price, the trade is executed at the mid-price.
- If one side is not able to trade at the mid-price, the trade is executed at the price that is within each side's price constraint that is closest to the mid-price.

Notwithstanding the above:

- LP IOC orders can only execute at the mid-price; and
- For Members that have not upgraded to Liquidnet 5.13 or higher, the execution price of a broker block accept cannot be higher than the mid-price as of the time of execution (in the case of a Member buy order) or lower than the mid-price as of the time that of execution (in the case of a Member sell order).

The foregoing is subject to the rules of execution priority, as described below. All executions in the H2O ATS are executed within (including at) the best bid and offer. A trade can only be executed in the H2O ATS if the buyer's price constraint is greater than or equal to the seller's price constraint.

**(vii) Liquidnet back-end software for H2O execution functionality**

An execution or cancellation of an order in the H2O ATS is deemed effective when it is received, processed and recorded by the Liquidnet back-end software, and is not effective until such time. The effectiveness of an execution or cancellation depends upon which event is first received, processed and recorded by the Liquidnet back-end software.

**(viii) Interaction of negotiation and H2O execution functionality**

A trader cannot have a firm order for the same shares in the H2O ATS and the Negotiation ATS at the same time. If a trader commences a negotiation in the Negotiation ATS of shares that are included in a firm order in the H2O ATS, the shares in the H2O ATS are paused prior to the trader's commencement of the negotiation.

**(ix) Broker block opportunities**

***Notification of broker block opportunities***

As described above, LPs can transmit resting orders to the H2O ATS. A Member with an opposite-side indication to an LP resting order can receive notification of the LP resting order as a broker block opportunity, except for LPs that have elected not to display their LP resting orders as broker block opportunities.

A Member can create a broker block accept in response to a broker block notification. A broker block accept only executes against an LP resting order if the buyer's price constraint is at or above the seller's price constraint. Members using Liquidnet version 5.13 (a version of Liquidnet 5) or any subsequent version of Liquidnet 5 can choose to accept a broker block

notification either with or without a mid-peg instruction. Upon request, LNI can restrict a Member with one of these versions from crossing the mid-price; if a Member has this configuration, the Member will only receive notification of a broker block opportunity if the price constraint of the LP order is mid-peg or better from the Member's perspective. If a Member has a prior version of Liquidnet 5, the Member cannot cross the mid-price, and the Member will only receive notification of a broker block opportunity if the price constraint of the LP order is mid-peg or better from the Member's perspective.

A Member does not receive notification of a broker block opportunity if the Member has a match in the Negotiation ATS with another Member or customer. If there are multiple LP contras, the Member only receives one broker block notification.

### ***Creation and execution of broker block accepts***

Upon receipt of notification of a broker block opportunity, a Member can create a broker block accept. A broker block accept is a resting order in the H2O ATS with a time-in-force, configurable by LNI, as notified by LNI to participants in advance (currently, two seconds). A broker block accept cannot be canceled by the Member during this time-in-force period.

During the time-in-force period, the broker block accept can execute against any contra-side orders in the H2O ATS, subject to meeting the tolerance of the Member's indication and the minimum execution quantity, as set forth above, and subject to the rules of execution priority as set forth below.

In response to an LP resting order, a Member is not able to reduce its quantity below the minimum size for execution of the LP resting order; this can reveal to the Member information regarding the minimum size for execution of the LP resting order.

### ***Configuration to participate in broker block functionality***

Members elect through Liquidnet Transparency Controls whether to interact with resting orders from LPs. If a Member elects to interact with resting orders from LPs, LNI can configure the Member to include or exclude receipt of notice of broker block opportunities. Members should contact their Liquidnet Sales coverage if they wish to change their configuration.

### ***Configuration to dismiss same symbol and side broker blocks for the rest of the trading day***

Upon request LNI can set a configuration where the system will display to a trader, upon receipt of a broker block notification, an option to dismiss the broker block notification for the remainder of the trading day. If the trader elects this dismissal option, the system will

block the trader from receiving any broker block notifications for the specific symbol and side for the rest of the trading day.

**(x) Execution priority for H2O ATS orders**

***Execution priority***

Orders in the H2O ATS are prioritized for execution as follows:

- ***Priority for better execution price.*** Where orders in the H2O ATS can execute at prices other than the mid-price, a contra-party that can provide a better execution price has priority over a contra-party that can provide a worse execution price
- ***Execution at an execution price.*** At a particular execution price, the following priority applies:
  - ***Execution against Member and customer orders.*** As a first priority, an order transmitted to the H2O ATS (the transmitted order) will execute against an order from a Member or customer (whether firm or conditional) that is resting in the H2O ATS as of the time of receipt of the transmitted order.
  - ***Execution against firm LP resting orders.*** As a second priority, the transmitted order will execute against a firm contra-side LP resting order that is resting in the H2O ATS as of the time of receipt of the transmitted order.
  - ***Execution against conditional LP resting orders.*** As a third priority, the transmitted order will execute against a conditional contra-side LP resting order that is resting in the H2O ATS as of the time of receipt of the transmitted order.
- ***Transmitted resting orders not executed in full upon receipt.*** Where the transmitted order is a resting order and is not executed in full upon receipt, the transmitted order can execute against any subsequently entered contra-order in the H2O ATS. As noted above, the possible types of contra-orders in the H2O ATS consist of:
  - LNI resting orders
  - Resting orders from LPs, firm or conditional
  - IOC orders from LPs
  - Member broker block accepts.

***Multiple contra-side orders within the same prioritization category***

If the H2O ATS receives two (or more) same-side resting orders in the same security available for execution and both (or all) are in the same prioritization category, and the H2O ATS then receives a contra-order, the H2O ATS executes the two (or more) same-side orders equally (for each order, up to its quantity), except that execution amounts are rounded up or down to the closest higher or lower round lot amounts to avoid an odd-lot execution. If an equal split would result in an execution size for a same-side order that is below the order's minimum quantity, the same-side order would not participate in the execution.

For purposes of the preceding paragraph, the prioritization categories are as follows:

- LNI resting orders (whether firm or conditional)

- Firm resting orders from LPs
- Conditional resting orders from LPs.

### ***Other applicable conditions***

The foregoing rules of priority are subject to minimum size and other conditions for execution as set forth in this Form ATS-N. In all cases, execution against a conditional order is subject to firm-up of the conditional order by the contra.

#### **(xi) Principal and agency orders by LPs**

LPs can send principal and agency orders to the H2O ATS. LPs can send customer orders to the H2O ATS, including orders of customers of their affiliates.

LNI provides to participants upon request a list of LPs that are enabled to trade US equities. This list identifies which LPs are enabled to send principal orders to the H2O ATS.

#### **(xii) Blocking interaction with LPs**

##### ***General***

Broker block accepts do not interact with IOC orders from LPs. If the parent order from a Member or customer can route to external venues, the associated LNI resting order interacts with orders from LPs. If the parent order from the Member or customer cannot route to external venues, the associated LNI resting order only interacts with orders from LPs if the Member or customer has elected to interact with resting or IOC orders from LPs, as applicable. A Member or customer makes these elections through Liquidnet Transparency Controls. A Member or customer that elects to interact with resting and IOC orders from LPs for orders of the Member or customer that do not route to external venues can elect to block interaction with certain LPs, as described in the response to Item 13 of this Part III.

##### ***Notification of new LPs***

If a Member or customer has elected to block interaction with at least one LP, LNI will notify the Member or customer at least one week prior to bringing live a new LP (and one week prior to enabling an LP to send principal orders where the LP had previously been enabled only to send agency orders), unless the Member or customer requests that LNI not provide this notice. LNI also will send this notice to other Members and customers if they request. LNI maintains an updated list of LPs for US equities on a password-protected site that LNI makes available to all Members and customers and sends the updated list to all Members and customers on a quarterly basis.

#### **(xiii) LNI as the sole execution venue for an LP order**

An LP is not permitted to recommend or propose to a customer that the customer designate LNI, or implement or provide any technology that designates LNI, as the sole execution venue for an order or facilitate a customer setting up this type of order. Any order transmitted to LNI should also be sent on similar terms to one or more other execution venues capable of executing the order. An LP is not permitted to recommend or propose any action or implement or provide any technology that seeks to evade this restriction – for example, selecting a second venue that the LP knows will be unable to execute the order.

#### **D. Compliance with short sale price test**

If there is an intra-day decline of 10% or more in the price of a US equity relative to the prior day's closing price, for the remainder of that trading day and the following trading day, the H2O ATS will only execute short-sale orders with a mid-peg instruction.

#### **E. Locked and crossed markets**

LNI will not execute an order for an equity if the market in that equity is crossed (i.e., the best posted bid is higher than the best posted offer). If the market in an equity is locked (i.e., the best posted bid is equal to the best posted offer), LNI can execute the order if at least one side of the trade has created an automated negotiation order or is responding to an H2O block notification.

#### **F. Trade errors**

If, as a result of an error, both sides to a trade in the H2O ATS agree to cancel the trade or agree to an adjustment in price, quantity or other term, the H2O ATS will cancel (and, if applicable replace) the original execution. LNI will record any replacement trade in the H2O ATS.

If, as a result of an error, LNI agrees to an adjustment in price, quantity or other term with one side to the trade but not the other side, LNI will effect that adjustment outside of the Liquidnet ATSs. The adjustment might require LNI to take on a principal position. When trading out of the principal position, LNI does not access the Liquidnet ATSs.