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INITIAL OPERATION REPORT, AMENDMENT TO INITIAL OPERATION REPORT
AND CESSATION OF OPERATIONS REPORT FOR ALTERNATIVE TRADING
SYSTEMS

WARNING: Failure to keep this form current and to file accurate supplementary information on a timely basis, or the failure to keep accurate books and records or otherwise to comply with the provisions of law applying to the conduct of alternative trading systems, would violate the federal securities laws and may result in disciplinary, administrative or criminal action.
INTENTIONAL MISSTATEMENTS OR OMISSIONS OF FACTS MAY CONSTITUTE CRIMINAL VIOLATIONS

INITIAL OPERATION REPORT AMENDMENT TO INITIAL OPERATION REPORT CESSATION OF OPERATIONS REPORT

1. Exact name, principal business address, mailing address, if different, and telephone number of alternative trading system:

A. Full name of alternative trading system (if sole proprietor, last, first and middle name):
Liquidnet H2O ATS

B. CRD Number:
103987

C. Name(s) under which business is conducted, if different from Item 1A.

D. SEC File No.:
8-52461

E. If this filing makes a name change on behalf of the alternative trading system, enter the previous name and specify whether the name change is of the _____ alternative trading system name (1A), or _____ business name (1C):

Previous name: _____

F. Alternative trading system's main street address (Do not use a P.O. Box):
498 Seventh Avenue
New York, New York 10018

G. Mailing address (if different):

H. Business telephone and facsimile number:
(646) 674-2000 (Telephone) (646) 674-2003 (Facsimile)

I. Contact employee:
Howard Meyerson – General Counsel (Name and Title) (646) 674-2044 (Telephone Number) (646) 674-2006 (Facsimile)

EXECUTION:
 The alternative trading system consents that service of any civil action brought by, or notice of any proceeding before, the SEC or a self-regulatory organization in connection with the alternative trading system's activities may be given by registered or certified mail or confirmed telegram, to the alternative trading system's contact employee at the main address, or mailing address if different, given in Items 1F and 1G. The undersigned, being first duly sworn, deposes and says that he/she has executed this form on behalf of, and with the authority of, said alternative trading system. The undersigned and alternative trading system represent that the information and statements contained herein, including exhibits, schedules, or other documents attached hereto, and other information filed herewith, all of which are made a part hereof, are current, true and complete.

Date: 12/19/2016 (MM/DD/YY) Liquidnet H2O ATS (Name of alternative trading system)
 By: [Signature] (Signature) Howard Meyerson – General Counsel, Liquidnet, Inc. (Printed Name and Title)

Subscribed and sworn before me this 19th day of DECEMBER, 2016 by THOMAS P. SCULLY (Notary Public)

My Commission expires JUNE 23, 2018 County of KINGS State of NEW YORK

*This page must always be completed in full with original, manual signature and notarization.
 Affix notary stamp or seal where applicable.*

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THOMAS P. SCULLY
NOTARY PUBLIC, STATE OF NEW YORK
No. 02SC6306330
Qualified in Kings County
Commission Expires June 23, 2018

**Exhibit A to Form ATS
Classes of Subscribers**

Alternative trading system name: Liquidnet H2O ATS
CRD No.: 103987
Filing date: December 19, 2016
SEC File No.: 8-52461

Classes of subscribers; any differences in access to the services offered by the ATS to different groups or classes of subscribers

The classes of subscriber to the Liquidnet H2O ATS are: Members; trading desk customers; automated routing customers; and liquidity partners. Pursuant to Section 1.04 of the Liquidnet trading rules (attached as Annex F-1a):

- A “Member” is an entity that meets the Member admission and retention criteria set forth in the trading rules and interacts with the Liquidnet broker in the Member’s region. Members transmit indications from their OMS to Liquidnet and manage those indications through the Liquidnet desktop application, which is installed at one or more trader desktops at the Member firm. Indications can be transmitted through a periodic sweep, FIX transmission or other method agreed among Liquidnet, the Member and the OMS vendor, as applicable.
- A “trading desk customer” is an entity that interacts with the Liquidnet broker in the customer’s region but does not have access to the Liquidnet desktop application. A trading desk customer interacts with Liquidnet by transmitting orders to the Liquidnet trading desk. Trading desk customers include customers that transmit orders to Liquidnet through their OMS.
- As an alternative means of accessing Liquidnet, buy-side institutions that meet certain applicable Member admission criteria as set forth in the trading rules can transmit orders (including conditional orders) to Liquidnet via an automated order router. These orders are treated the same as algo orders (as described in the trading rules). These buy-side institutions can participate directly, through a service provider, or through a routing securities dealer (referred to as an “automated routing dealer”) as long as the securities dealer identifies the buy-side institution to Liquidnet on an order-by-order basis (through FIX or an equivalent mechanism).
- “Liquidity partners” (LPs) are exchanges, ATSS, MTFs and brokers that transmit immediate-or-cancel (IOC) or resting orders to Liquidnet H2O for execution. LPs do not have access to the Liquidnet desktop application. LPs do not interact with the Liquidnet negotiation system. LPs also can transmit orders through the Liquidnet trading desk, but LPs are not defined as trading desk customers because LPs cannot interact with the Liquidnet negotiation system.

Trading desk customers and automated routing customers as a group are referred to as “customers.” Members have access to the Liquidnet desktop application; customers and LPs do not have access to the Liquidnet desktop application.

A firm can participate as both a Member and customer, subject to meeting the applicable admission and retention criteria, as set forth in Section 1.05 of the Liquidnet trading rules. When transmitting orders to the applicable Liquidnet broker through the Liquidnet desktop application, the firm is considered a Member; when transmitting orders through the Liquidnet trading desk or through automated routing, the firm is considered a customer.

Where a Member or customer creates an algo order and Liquidnet utilizes a third-party broker's routing technology, the third-party broker can route all or a portion of the order to the Liquidnet negotiation and H2O systems, as described further in Exhibit F. In each case, Liquidnet can identify the Member or customer associated with any such order through an order value provided by Liquidnet to the third-party broker and communicated back to Liquidnet by the third-party broker, but Liquidnet does not disclose to the third-party broker the identity of the Member or customer.

Section 1.06 of the Liquidnet trading rules sets forth the admission and retention criteria for Members, customers and LPs.

The trading rules specify the services that are provided to Members, customers and LPs, as applicable, including the following:

- Part I of the trading rules provides an overview of Liquidnet's trading services
- Part II of the trading rules covers the receipt and handling of indications by Liquidnet
- Part III of the trading rules covers the creation of Liquidnet algo orders
- Part IV of the trading rules describes Liquidnet's auto-ex order functionality
- Part V of the trading rules describes Liquidnet's automate negotiation order functionality
- Part VI of the trading rules describes targeted invitations functionality
- Part VII of the trading rules describes Liquidnet's negotiation functionality, which is provided through the Liquidnet Negotiation ATS
- Part VIII of the trading rules describes Liquidnet's H2O execution functionality, which is provided through the Liquidnet H2O ATS
- Part IX of the trading rules describes NBBO price, execution quantity and execution time provisions for specific jurisdictions
- Part X of the trading rules discusses additional services provided by Liquidnet, including: the trading desk; execution consulting services; transaction cost analysis; Liquidnet Capital Markets; commission management; sponsored broker; analytics; fixed income trading services.
- Part XI of the trading rules covers use and disclosure of trading information and associated controls
- Part XII of the trading rules covers operational, regulatory and compliance provisions.

Information relating to trading of non-U.S. securities set forth in the trading rules or otherwise set forth in this Form ATS filing is provided for informational purposes only as trades in non-U.S. securities are executed by Liquidnet's non-U.S. affiliates.

**Exhibit B to Form ATS
Types of Securities**

Alternative trading system name:	Liquidnet H2O ATS
CRD No.:	103987
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Types of securities the ATS trades

Liquidnet trades U.S.-listed equity securities (including ADRs) on the Liquidnet H2O ATS.

**Exhibit C to Form ATS
Counsel**

Alternative trading system name: Liquidnet H2O ATS
CRD No.: 103987
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Name, address and telephone number of counsel for the ATS

Howard Meyerson
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**Exhibit D to Form ATS
Articles of Incorporation and By-laws**

Alternative trading system name:	Liquidnet H2O ATS
CRD No.:	103987
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Certificate of incorporate and by-laws

Attached as Annex D-1¹ is a copy of Liquidnet's certificate of incorporation, with all amendments.

Attached as Annex D-2 is a copy of Liquidnet's by-laws.

¹ Annexes not marked with an asterisk have previously been filed and have not changed since the prior filing date.

**Exhibit E to Form ATS
Other Entities**

Alternative trading system name:	Liquidnet H2O ATS
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Roles and responsibilities of any entity, other than the ATS, that is involved in the operation of the ATS, including the execution, trading, clearing and settling of transactions on behalf of the ATS

Liquidnet, Inc. has entered into an agreement with Goldman Sachs & Co. (GS&Co.) pursuant to which GS&Co. acts as clearing firm for trades executed by Liquidnet. The clearing process is described in Section 12.07 of the trading rules (see Annex F-1a), including: settlement date; buy-ins and sell-outs; allocations; settlement parties; settlement process; and trade confirmations.

Pursuant to a Trading System Services Agreement, Liquidnet Holdings, Inc., the parent company of Liquidnet, Inc., provides technology-related services to Liquidnet, Inc., including services related to the development, testing and maintenance of the trading system for the ATS. Further, pursuant to the Trading System Services Agreement, Liquidnet Holdings grants to Liquidnet, Inc. a license to the trading system developed by Liquidnet Holdings. Liquidnet Holdings has entered into similar Trading System Services Agreements with its other operating subsidiaries in the UK, Canada, Japan, Hong Kong and Australia.

Pursuant to an Administrative Services Agreement, Liquidnet Holdings provides various administrative services to Liquidnet, Inc., including human resource, legal, finance, corporate strategy, marketing, project management, and facilities operation services. Liquidnet Holdings has entered into similar Administrative Services Agreements with its other operating subsidiaries in the UK, Canada, Japan, Hong Kong and Australia.

**Exhibit F to Form ATS
Operation of the System**

Alternative trading system name:	Liquidnet H2O ATS
CRD No.:	103987
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a. Manner of operation of the alternative trading system

1. Liquidnet Negotiation and H2O ATSs

Liquidnet, Inc. operates two alternative trading systems (ATSs) for trading equity securities, each of which is registered with the Securities and Exchange Commission (SEC).

The Liquidnet Negotiation ATS provides functionality for one-to-one negotiation between traders at two institutional investor firms using the Liquidnet desktop application to manually negotiate with each other. A negotiation also can involve a trader at an institutional firm manually negotiating against an automated negotiation process.

The Liquidnet H2O ATS provides functionality for the automated execution of non-displayed orders at the mid-point between the highest displayed bid and lowest displayed offer in the market.

The negotiation and H2O execution functionality are described in more detail in this Exhibit F.

2. Additional information

For additional information regarding the manner of operation of the ATS, please refer to the Liquidnet trading rules (Annex F-1a) and Liquidnet Order Handling Q & A Document (Annex F-2).

b. Procedures governing entry of orders into the alternative trading system

1. Indications

A. Indications

Members interact with Liquidnet by transmitting indications to the Liquidnet broker in the Member's region. Indications are non-binding, which means that a further affirmative action must be taken by the trader before an executed trade can occur.

B. OMS interface

OMS requirement

Every Member that provides indications to Liquidnet must have an OMS with which Liquidnet can interface. An OMS is software that a Member uses to manage its order flow.

OMS integration adapter

When a trader logs on to Liquidnet, the Liquidnet integration adapter electronically transmits to Liquidnet orders from the Member's OMS assigned to that trader. After the trader has logged on, the Liquidnet integration adapter periodically queries the Member's OMS and updates Liquidnet with changes from the OMS relating to the trader's orders.

OMS limit orders

Liquidnet may filter or make ineligible for trading indications of liquidity where the related OMS order has a limit instruction that is outside the market. If the OMS limit price for a buy order is below the best bid price in the applicable market, or the OMS limit price for a sell order is above the best ask price in the applicable market, it is considered "outside the market."

Additional information

The method of integration with a Member, including whether an OMS integration adapter is provided, can vary based on the Member's OMS and workflow. Members can obtain additional information regarding specific OMS interfaces by contacting Liquidnet Member Services.

C. Indication quantity

OMS order quantity and available quantity

"OMS order quantity" is the quantity specified in the Member's OMS for a particular OMS order. "Available quantity" is the quantity specified in the Member's OMS for a particular OMS order, less the quantity previously executed or placed at other trading venues, as specified in the Member's OMS.

OMS order quantity and available quantity are determined by the Member's OMS. A trader cannot change these quantities in Liquidnet except by changing the quantities in his OMS.

Working quantity

"Working quantity" for an indication received by Liquidnet defaults to the available quantity for that indication, but a trader can manually change his working quantity with Liquidnet to less than (but not more than) the available quantity. A trader's working quantity sets the maximum quantity he or she can execute in a negotiation or through a Liquidnet algo, LN auto-ex or automate negotiation order. A trader can change his working quantity for an indication at any time prior to a negotiation.

2. Liquidnet algo orders

A. Creation of algo orders by participants

Members

Members can create algo orders through the Liquidnet desktop application. A trader at a Liquidnet Member or customer firm can create a Liquidnet algo order by designating all or a portion of an indication as a Liquidnet algo order. A trader can designate a Liquidnet algo order whether or not the trader has received notification of a match on the associated indication.

Customers

Trading desk customers and automated routing customers can create algo orders through their OMS.

Liquidnet trading desk personnel

Liquidnet trading desk personnel can create algo orders when handling trading desk customer orders, subject to the customer's instructions. Liquidnet trading desk personnel have access to the Liquidnet algo orders described below; they also have access to algos licensed from third-party algo providers and can route orders directly to specific third-party execution venues.

Liquidity partners

US liquidity partners can create algo orders for US equities that interact with Liquidnet H2O and external venues, but not with the Liquidnet negotiation system. These algo orders interact with Liquidnet H2O in the same manner as other LP orders but also can access third-party execution venues.

B. Liquidnet Only algo orders

Members, customers and Liquidnet trading desk personnel can select among various Liquidnet algo types, as set forth below. If a user selects a "Liquidnet only" algo, the order can access the Liquidnet negotiation system and Liquidnet H2O but will not access external venues. If the user selects an algo type that is not "Liquidnet only", the order can access the Liquidnet negotiation system, Liquidnet H2O and external venues. While Liquidnet Only orders do not route to external venues, Liquidnet refers to them as algo orders because they are created by participants in the same manner as Liquidnet algo orders that can route to external venues. For US equities, Liquidnet Only is a configuration (specifically, a venue type) of the Liquidnet Dark algo. For an order routed to an external venue, execution is subject to the rules of the external venue to which the order is routed.

C. Direct to desk orders

Liquidnet Members can use the Liquidnet desktop application to transmit orders to the Liquidnet trading desk by selecting Direct to Desk. Liquidnet also can provide the Direct to Desk option to customers through their OMS. When a Member or customer creates a Direct to Desk order, the Member or customer will provide instructions to the Liquidnet trading desk relating to the handling of the order.

D. Firm and conditional algo orders

Types of conditionality

Algo orders can interact with the Liquidnet negotiation and H2O systems on a firm or conditional basis. Conditional functionality can be directed by the Member or customer or can be incorporated into Liquidnet's algo order functionality.

Conditional functionality for algo orders directed by Members and customers

Members and customers that meet certain criteria can take advantage of conditional order functionality for algo orders. This functionality, which is fully automated from the point at which the Member or customer transmits the conditional order to Liquidnet, allows the Member or customer to rest actionable order flow in the Liquidnet negotiation and H2O systems that may include shares already placed at other trading venues. These orders are considered “conditional” since the Member or customer will commit the order only prior to execution with a matched contra. These conditional orders do not interact with IOC orders from LPs.

Prior to executing a conditional order, Liquidnet sends a request to the Member’s or customer’s system to commit the shares on the order, and the Member’s or customer’s system responds by sending all or a portion of its remaining unexecuted shares to Liquidnet (known as a “firm-up”). This firm-up request is used to protect the Member or customer against over-execution. Member and customer firm-up rates are periodically reviewed by Liquidnet Sales and Algorithmic Services Group (ASG) and quantitative analytics personnel, with appropriate follow-up to the Member or customer to address any issues.

Conditional functionality incorporated into Liquidnet’s algo functionality

For certain types of algos, as described further below, Liquidnet interacts with the negotiation and H2O systems on a conditional basis. This type of conditional functionality does not require a firm-up request from the Member or customer. Instead, the Liquidnet algo, which could be working shares at an external venue, must firm-up the order to the negotiation and H2O system, as applicable, immediately prior to execution.

Not-held orders

Liquidnet handles all algo orders on a not held basis, unless otherwise expressly instructed by the Member or customer. This means that Liquidnet is not held to seek immediate execution of the order but instead uses its judgment to seek best execution of the order consistent with the Member’s or customer’s instructions. As discussed herein, a limit order refers to a not held order where the Member or customer specifies a maximum purchase or minimum sale price; a market order refers to a not held order where the Member or customer does not specify a maximum purchase or minimum sale price.

E. Currently available algos

In the US, Liquidnet makes generally available the following suite of algos:

Region	Liquidity Seeking Algos				Benchmark Algos (aka Basic Algos)					Portfolio Trading Algos
	Liquidnet Only	Liquidnet Dark	Barracuda	Sweep Then Post	VWAP	TWAP	POV	IS	CLOSE	
US	Available as a configuration (venue type)	Available	Available	Available	Available					Available

	of Liquidnet Dark					
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Members and customers should contact their Liquidnet coverage and Liquidnet’s Algorithmic Services Group (ASG) personnel for more detail regarding the specific algos that are available in each region.

Direct to desk functionality is not considered an algo type and is available for all regions.

F. Roll-out process for new algos and significant changes

The roll-out process for new algos and significant algo changes typically involves three stages:

- **Initial stage.** During the initial stage, the algo changes are made available only to Liquidnet trading desk personnel.
- **Pilot stage.** During the pilot stage, the algo changes are made available to specific Members and customers. As a general matter, priority is given to Members and customers that are current active users of the applicable algo or that have indicated an intention to use the applicable algo. Where a Member or customer requires customization of an algo that would require time for Liquidnet and the Member or customer to implement, that Member or customer might not be included in the pilot stage.
- **Full roll-out.** At this stage, the algo changes are made available to all Members and customers, subject to technical implementation.

It is Liquidnet’s policy to provide Members and customers advance notice of the initial and full roll-out stages of a new algo type and to provide participating Members and customers with notice of the pilot stage. The algo types are: Liquidity Seeking Algos; Benchmark Algos; and Portfolio Trading Algos. Liquidnet also will update on a periodic basis when new algos became available within a particular algo type in a particular region during a preceding period.

G. Algo order parameters

A parameter for an order means an election relating to an order that a Member can make through the desktop application. A configuration means an election that Liquidnet Product Support personnel can implement at the request of a Member.

The following parameters are available for Liquidnet algos, depending upon the Liquidnet algo type:

- Strategy
- Algo target quantity
- Algo limit price
- Participation level (where applicable)
- Urgency (where applicable)
- I Would price (where applicable)
- Start and end time
- Participation in opening and closing auction (where applicable)

- Post types
- Venue types
- Minimum quantity.

The following additional parameters are available for the portion of a Liquidnet algo that interacts with the Liquidnet negotiation and H2O systems on a conditional basis:

- Block target quantity
- Block limit price
- Block minimum quantity.

Liquidnet can provide additional algo parameters from time-to-time. Members and customers should contact their Relationship Manager or Liquidnet Member Services for more details regarding algo parameters.

H. Algo order configurations

The following configurations are available for Liquidnet algos, depending upon the Liquidnet algo type:

- Minimum execution quantity (applies to first execution on the algo only)
- Recurring minimum execution quantity (applies to all executions on the algo)
- Algo type for odd-lot residuals for US equities
 - For US equities, if there is an odd-lot remaining on a Liquidnet Only or Liquidnet Dark algo order, Liquidnet automatically cancels the Liquidnet Only or Liquidnet Dark algo and generates an “implementation shortfall” algo order. A Member or customer can request that a different algo type be used for handling these odd-lot residuals.
- Venues to which an algo can route (where applicable)
- Whether fair value protection is applied
- Whether block mode is applied (see discussion of block mode below)
- Liquidnet Dark can access the Liquidnet negotiation and H2O systems for a period of time prior to routing to external venues; in this scenario, routing to external venues is delayed for a configurable default time period set by Liquidnet. Members and customers can request that Liquidnet modify this configuration.

The following additional configurations are available for the portion of a Liquidnet algo that interacts with the Liquidnet negotiation and H2O systems on a conditional basis:

- Recurring block minimum quantity
- Block venues
 - Whether to interact with either or both of the negotiation and H2O systems

Liquidnet can provide additional algo order configurations from time-to-time. Members and customers should contact their Relationship Manager or Liquidnet Member Services for more details regarding algo order configurations.

A customer can elect on an order-by-order basis whether to interact with LP orders. For buy-side customers, this election is only available if the customer has elected through Liquidnet Transparency Controls to interact with LPs.

I. Limit price for algo orders; imputed limit price where trader does not set a limit price

When a Member provides a limit price in its OMS, Liquidnet applies that limit price to an algo order created by the Member. If the Member does not provide a limit price in its OMS, the Member can set a limit price for the associated indication through the Liquidnet desktop application (referred to as a “match limit”). In that case, Liquidnet applies the match limit to the Member’s algo order. A trader can modify a match limit but not an OMS limit when creating an algo order.

A trader can elect one of the following defaults for the scenario where a trader does not have an OMS limit or a match limit:

- Apply the default imputed limit price described below
- Override the default imputed limit price constraint and set an alternative imputed limit, as described below
- Set no imputed limit price.

The default imputed limit price restricts a mid-peg proposal from being executed at a price that, in the case of a buy (or sell) order, is more than 35 basis points above (or below) the mid-point of the best bid and offer in the market as of the time that the trader creates the algo order. Members can override the default imputed limit price of 35 basis points for one or more countries and set a different imputed limit price through the Liquidnet desktop application expressed as either of the following:

- Basis points from the mid-point as of the time that the trader creates the algo order; or
- Cents from the best offer in the market (in the case of a buy order) or cents from the best bid in the market (in the case of a sell order) as of the time that the trader creates the algo order.

In all cases, the minimum price increments of the applicable country (or the applicable class of securities within the country) would apply, such that if the limit price above is not equal to a permitted increment, the effective limit price would be:

- In the case of a buy limit price, the lowest permitted price increment above that limit, and
- In the case of a sell limit price, the highest permitted price increment below that limit price.

The imputed limits prices above are subject to the following exceptions for US equities for Liquidnet 5.4 and below users:

- If the submitting trader is a buyer, and the trader’s imputed limit price is set as basis points from the mid, the imputed limit price will be adjusted to twenty cents above the mid.
- If the submitting trader is a seller, and the trader’s imputed limit price is set as basis points from the mid, the imputed limit price will be adjusted to twenty cents below the best bid.
- If the submitting trader is a buyer, and the trader’s imputed limit price is set as cents from the best offer and is not a five-cent increment, the imputed limit price will be adjusted to the next highest five-cent increment.

- If the submitting trader is a seller, and the trader's imputed limit price is set as cents from the best bid and is not a five-cent increment, the imputed limit price will be adjusted to the next lowest five-cent increment.

For purposes of the preceding exceptions:

- The mid as of the time that the trader creates an algo order is referred to as the "mid".
- The best bid as of the time that the trader creates an algo order is referred to as the "best bid".
- The best offer as of the time that the trader creates an algo order is referred to as the "best offer".

These exceptions will not apply for Liquidnet 5.5 or above users.

A trader can modify an imputed limit price on an order-by-order basis, subject to complying with the price increment requirements of the applicable country (or class of securities of the country).

J. Algo order interaction with the Liquidnet negotiation and H2O systems and external venues

Interaction through firm and conditional orders

Liquidnet manages algo order interactions with the Liquidnet negotiation and H2O systems. Interaction with the negotiation and H2O systems can be on a firm or conditional basis, depending upon the algo selected by the Member or customer, as follows:

- ***Liquidnet Only***. Liquidnet Only algo orders only interact with the negotiation and H2O systems as firm orders.
- ***All Benchmark algos (except Close) and Barracuda***. These orders interact with the negotiation and H2O systems when the Member or customer sets the Liquidnet I Would functionality with a block target quantity greater than zero. In this scenario, these orders interact with the negotiation and H2O systems as conditional orders. Interaction is based on the block target quantity, block limit and block minimum quantity designated by the Member or customer. These orders may also interact with the negotiation and H2O systems as firm orders, where third-party routing back-functionality (as described in the next sub-section) applies.
- ***Liquidnet Dark***. These orders can interact with the negotiation and H2O systems as conditional and as firm orders.
- ***PT***. PT algo orders only interact with the negotiation and H2O systems as firm orders.
- ***Sweep then Post and Close***. These orders are executed externally and do not interact with the negotiation and H2O systems.

If Liquidnet transmits an algo order to the negotiation and H2O systems on a conditional basis, the algo order can interact with contra-side liquidity in the negotiation and H2O systems, except for contra-side IOC orders in Liquidnet H2O. If Liquidnet transmits the order to the negotiation and H2O systems on a firm basis, the algo order can also interact with contra-side IOC orders in Liquidnet H2O.

Use of internal and third-party algo and routing technology

Liquidnet internally develops algorithmic, aggregator and smart order routing technologies to maintain trading schedules and route to external venues and exchanges. Liquidnet also utilizes third-party algorithmic, aggregator and smart order routing technologies to maintain trading schedules and route to exchanges and other venues, including the Liquidnet negotiation and H2O systems. Where Liquidnet utilizes a third-party broker's routing technology, the third-party broker can, consistent with Liquidnet's instructions, route all or a portion of the order back to the Liquidnet negotiation and H2O systems, in which event Liquidnet will, for purposes of the Liquidnet trading rules, treat an order routed in this manner as originating from the underlying Member or customer. This includes applying the underlying Member's or customer's elections through Liquidnet Transparency Controls (relating to interaction with sources of liquidity and use of data) in connection with the order and any resulting execution. We refer to this as "third-party broker routing-back" functionality. Third-party broker routing-back functionality can apply for the following algos: all Benchmark algos (except Close); and PT.

In the situation where a Member or customer algo order has both a conditional order and a firm order matching with a contra-side order in Liquidnet H2O, Liquidnet will seek to prioritize the execution that would result in a larger execution.

Members and customers should contact Liquidnet Member Services and ASG personnel for more detail regarding the third-party algorithmic, aggregator and smart order routing technologies used and licensed by Liquidnet.

Taking into account external and Liquidnet executions

When determining routing logic for current algo orders and evaluating the execution performance of different trading venues, Liquidnet can take into account historical and intra-day executions of other Liquidnet algo orders in the Liquidnet negotiation and H2O systems and at external venues.

Combining conditional order functionality with a third-party broker's algo selected by the Member

Members can combine conditional order functionality with a third-party broker's algo, as selected by the Member. With this functionality, the third-party algo can work an order in external venues while at the same time resting the order in the Liquidnet negotiation and H2O systems on a conditional basis. Members can separately configure the quantity and limit price of the portion of the order resting in Liquidnet.

Access by Liquidnet algo orders to a subset of information that would be available to a manual Contra (block mode)

Liquidnet algo orders (including conditional orders) for Members and customers may receive notification in real-time of a subset of information regarding matched contras that would be available to a trader at a Member firm using the Liquidnet desktop application. These notifications include: matching with a passive contra; matching with an active contra; commencement of a negotiation with a contra; end of a negotiation with a contra; and breaking of a match with a contra.

Liquidnet's algos can utilize this information in making decisions relating to the routing of the Member's or customer's algo order to the Liquidnet execution venues and external venues. The objective in providing these notifications is to increase the opportunity for an algo order to achieve a block

execution with a contra in a Liquidnet execution venue. This functionality is sometimes referred to as “block mode”. Block mode is available for the Liquidnet Dark, IS and Barracuda algos for US equities.

Block mode for LP algo orders

Liquidnet algo orders (including conditional orders) for LPs may receive notification in real-time when a broker block notification is sent to a Member with an opposite-side indication and when a broker block notification terminates. This applies to the same algos as set forth in the preceding sub-section.

Liquidnet’s algos for LPs can utilize this information in making decisions relating to the routing of the LP’s algo order to the Liquidnet execution venues and external venues. The objective in providing these notifications is to increase the opportunity for an LP algo order to achieve a block execution with a contra in a Liquidnet execution venue.

K. Slicing

Through the Liquidnet desktop application, a trader can designate different algo types for different portions of the same indication.

L. Guidelines for automated routing customers

Liquidnet has established the following guidelines for automated routing customer orders transmitted through a service provider or broker-dealer (referred to as a “provider”):

- For firm orders, average order resting time of one minute or more
- For conditional orders, average order resting time of two minutes or more.

These guidelines are intended to maximize the value of the interaction between automated routing customers and other Liquidnet participants for the benefit of each side. On a quarterly basis, Liquidnet reviews each provider’s performance relative to these guidelines. If a provider fails to meet these guidelines on a consistent basis, Liquidnet can commence a discussion with the provider as to whether it is beneficial for the provider and Liquidnet’s participants to continue the automated routing relationship.

M. Algo order automatically created upon negotiated execution

Conditions

Upon request of a Member, Liquidnet will configure the System to automatically create an algo order upon behalf of the Member where all of the following conditions occur:

- A trader at the Member firm executes a trade through manual negotiation, as described in Section 6 below.
- The trader’s negotiation quantity at the time of execution is higher than the negotiated execution quantity by at least a round lot for the applicable market
- The negotiated execution quantity meets the following minimum size requirement to trigger this functionality for US equities: 10K shares or 10% of ADV
- The Member does not, at the time, have a desktop algo order with the same symbol and side.

Automatic creation of algo order

If an execution occurs that meets the conditions set forth in the preceding sub-section, and a Member has elected this configuration, the System will terminate the negotiation and automatically create an algo order on behalf of the Member with a time-in-force of one minute. Liquidnet may change the time-in-force from time-to-time within a range of 30 seconds and two (2) minutes, subject to posting notification on the Member website; based on these changes, the time-in-force may vary based on instrument type.

The limit price for the order is the negotiated execution price, except that in the case of a mid-price negotiated execution where the execution price is not a permitted limit price in the applicable jurisdiction, the system will round the limit price to the next lower (in the case of a buy order) or higher (in the case of a sell order) permitted limit price for that jurisdiction.

The quantity for the order is the lower of the following amounts:

- The amount by which the trader's negotiation quantity at the time of execution exceeds the negotiated execution quantity
- A default maximum order quantity for the applicable instrument type (in shares or principal value) configured by Liquidnet at the Member's request.

Available by instrument type

A Member can elect to enable this functionality for one or more instrument types.

Ability to edit or cancel

The Liquidnet desktop notifies the user when an algo order has been created as described in this section. A user can edit or cancel the algo order in the same manner as any other desktop algo order.

Available on a pilot basis

Liquidnet currently makes this functionality available on a pilot basis for US equities. During the pilot, Liquidnet may limit the number of participants to allow for assessment and potential modification of the new functionality. After the pilot, Liquidnet intends to make the functionality available to all participants for US equities.

3. LN auto-ex orders

A. Creation of LN auto-ex orders by Members

Members can create LN auto-ex orders through the Liquidnet desktop application. A trader at a Liquidnet Member firm can create an LN auto-ex order by designating all or a portion of an indication as an LN auto-ex order. A trader can designate an LN auto-ex order whether or not the trader has received notification of a match on the associated indication.

Execution venues

LN auto-ex orders can access the Liquidnet negotiation system and Liquidnet H2O but cannot access external venues (except for clean-up quantity, as described below).

Clean-up quantity

For certain instrument types, a Member can elect a clean-up quantity on an order-by-order basis. If the remaining quantity of an order is at or below the designated clean-up quantity, Liquidnet can route the order to a third-party execution venue.

Interacting with LP liquidity

When creating an LN auto-ex order, a Member that has elected through Liquidnet Transparency Controls to interact with LP resting orders can elect on an order-by-order basis whether to interact with this type of LP order.

B. Firm and conditional LN auto-ex orders

LN auto-ex orders can be conditional or firm, as directed by the Member. The creation of a conditional LN auto-ex order does not generate a placement in the Member's OMS immediately upon order creation, and instead generates a placement either when the LN auto-ex order is matched with a contra or prior to execution, as directed by the Member. The creation of a firm LN auto-ex order generates a placement in the Member's OMS immediately upon order creation.

Prior to executing a conditional order, Liquidnet sends a request to the Member's system to commit the shares on the order, and the Member's system responds by sending all or a portion of its remaining unexecuted shares to Liquidnet (known as a "firm-up"). This firm-up request is used to protect the Member against over-execution. Member firm-up rates are periodically reviewed by Liquidnet Sales personnel, with appropriate follow-up to the Member to address any issues.

C. Parameters for LN auto-ex orders

The following parameters are available for LN auto-ex orders:

- Quantity
- Limit price
- Cancel condition: match break, cancel timer (order duration) or cancel time
- Minimum execution quantity
- Whether minimum execution quantity applies to all executions on the auto-ex order or only the first execution
- Whether or not to interact with LPs
- Clean-up quantity.

D. Configurations for LN auto-ex orders

The following configurations apply for LN auto-ex orders:

- Whether to interact on a firm or conditional basis

- Clean-up quantity.

4. Automate negotiation orders

A. Creation of automate negotiation orders by Members

Members can create automate negotiation orders through the Liquidnet desktop application. A trader at a Liquidnet Member firm can create an automate negotiation order by designating all or a portion of an indication as an automate negotiation order. A trader can only create an automate negotiation order when the trader has received notification of a match on the associated indication.

B. Availability and execution venues

Availability

Automate negotiation order functionality is available for all regions.

Execution venues

Automate negotiation orders can access the Liquidnet negotiation system and Liquidnet H2O but cannot access external venues, except that, for US and Canadian equities and most EMEA equities, if there is an odd-lot remaining on an automate negotiation order, Liquidnet automatically cancels the automate negotiation order and generates an 'implementation shortfall' algo order. A Member can request that a different algo type be used for handling these odd-lot residuals.

Interacting with LP liquidity

Automate negotiation orders do not interact with LP orders.

Firm orders

Automate negotiation orders must be firm.

C. Parameters for automate negotiation orders

The following parameters are available for automate negotiation orders:

- Quantity
- Limit price
- Minimum execution quantity (if previously configured by the Member).

D. Configurations for automate negotiation orders

The following configurations apply for automate negotiation orders:

- Match break condition; or cancel timer (order duration)
- Whether minimum execution quantity applies to all executions on the automate negotiation order or only the first execution.

E. Minimum quantity for automate negotiation orders

When a trader creates an automate negotiation order, the system will not execute the automate negotiation order against a contra order if the size of the contra order is below the minimum quantity of the automate negotiation order. Minimum quantity for an automate negotiation order is determined in the same manner as match tolerance for a manual negotiation.

A trader using Liquidnet 5.4 can elect to include a field in the trader's desktop application that allows the trader to adjust his or her minimum quantity for an automate negotiation order prior to creating the automate negotiation order. The minimum quantity cannot be less than Liquidnet's minimum execution size for the applicable symbol and cannot be greater than the trader's match tolerance at the time the match commenced. This field can default to either of the following quantities as requested by a Member: Liquidnet's minimum execution size for the applicable symbol (available upon initial release); or the trader's match tolerance at the time the match commenced (to be made available in a subsequent release).

F. Notification of negotiation status

The desktop application notifies a trader using automate negotiation functionality of the status of any ensuing negotiation with the contra in a similar manner as a manually negotiating trader.

5. Targeted invitations

Targeted invitation functionality has been introduced for US equities.

A. Two-way and one-way targeted invitations

There are two types of targeted invitations:

- Two-way targeted invitations
- One-way targeted invitations.

In a two-way targeted invitation, the sender receives certain information regarding the actions of the recipients, as described herein. In a one-way targeted invitation, the sender does not receive information regarding the actions of the recipients.

One-way targeted invitations are an optional parameter or configuration associated with algo orders (including Liquidnet Only) or LN auto-ex orders.

Liquidnet currently provides functionality for two-way targeted invitations. Liquidnet intends to introduce one-way targeted invitation functionality, as described in Section 5.H below. This disclosure provides additional detail regarding two-way and one-way targeted invitations.

B. Qualifying Members

Only Qualifying Members, as described in this section, can receive targeted invitations. Qualifying Members also can send two-way targeted invitations and one-way targeted invitations (subject to one-

way targeted invitation functionality becoming available). Members that are not qualifying Members, as well as customers, cannot receive targeted invitations and can send one-way targeted invitations, but not two-way targeted invitations.

Qualifying Members are determined on a quarterly basis based on a Member's activity during the two prior calendar quarters. To qualify for any quarter, a Member must meet either of the following conditions (or set of conditions):

- Average daily liquidity of USD \$100M or more provided to Liquidnet during either of the two prior quarters
- Positive action rate (PAR) of 40% or higher during either of the two prior quarters.

Liquidnet will make this determination for each Member promptly after the end of each calendar quarter, notify Members whose eligibility status has changed, and implement the changed status for the remainder of the quarter.

As an example of timing, during early January 2016, Liquidnet would determine which Members qualify as qualifying Members based on the positive action rate and liquidity data for Q3 and Q4 2015, notify Members whose qualification status has changed, and implement the changed qualification status for these Members for the remainder of the 1st quarter of 2016.

Liquidnet can make exceptions to the eligibility requirements from time-to-time if failure to meet the requirements was the result of a technology configuration (for example, if PAR was below 40% as a result of a technology configuration), subject to an internal process to ensure any exceptions are determined in an objective and non-discriminatory manner.

If a Member has trading desks in multiple regions that operate under a single Member ID, the Member can qualify as a Qualifying Member in each region if any region meets the Qualifying Member conditions.

Liquidnet can update the conditions for becoming a Qualifying Member at any time upon prior notice to Members, but any change that further restricts the terms upon which Members can qualify will only become effective subject to 30 days' prior notice to Members.

A new Member is considered a Qualifying Member during the calendar quarter that it commences trading on Liquidnet and for the following calendar quarter.

For purposes of the determinations above, Liquidity is based on the indications transmitted by a Member to Liquidnet. The liquidity of an indication for a particular day is the maximum available quantity of the indication during that day. Average daily liquidity during a quarter takes into account trading days only. For purposes of computing average daily liquidity, amounts in a currency other than US dollars are converted to US dollars. PAR is rounded to the nearest whole percent.

C. Liquidnet Transparency Controls for targeted invitations

To receive targeted invitations and send two-way targeted invitations, a Member must opt in through Liquidnet Transparency Controls and otherwise qualify as a Qualifying Member. Members and

customers can send one-way targeted invitations whether or not they opt-in through Liquidnet Transparency Controls, and there are no qualification requirements. By opting in to targeted invitations through Liquidnet Transparency Controls, a Member opts in to Liquidnet accessing the Member's indication, invitation and execution data to determine whether the Member should receive a targeted invitation, as described below. Any opt in to targeted invitations through Liquidnet Transparency Controls applies to all regions where this functionality is available, but upon request of a Member Liquidnet can disable access to targeted invitations based on trader or instrument type.

D. Description of two-way targeted invitation functionality

Sending a two-way targeted invitation notification

Through the Liquidnet desktop application, a trader at a Qualifying Member firm can send a two-way targeted invitation notification to other Qualifying Members. A targeted invitation notification relates to a specific stock.

A two-way targeted invitation has a notification component, as described herein, and, if there is at least one qualifying recipient for the targeted invitation (as described below), results in a firm order in Liquidnet H2O (a "targeted invitation order") and an indication available for matching in the Liquidnet negotiation system. A targeted invitation order can execute against contra-side orders in the Liquidnet negotiation and H2O systems in the same manner as a Liquidnet only algo order, subject to the following exceptions:

- The notification and other provisions of this disclosure apply
- Two-way targeted invitation orders cannot execute against orders from LPs.

Setting criteria for who can receive a targeted invitation notification

This sub-section applies to the notification component of a targeted invitation. When creating a two-way targeted invitation, a trader must designate a look-back period, which can be (i) the current trading day, (ii) the current trading day and the prior trading day, or (iii) the current trading day and the five preceding trading days.

If a Member has upgraded to Liquidnet 5.3, a trader at the Member firm can designate any of the following look-back periods for a two-way targeted invitation:

- Current trading day
- Current trading day and the prior trading day
- Current trading day and the 5 preceding trading days
- Current trading day and the 10 preceding trading days
- Current trading day and the 15 preceding trading days
- Current trading day and the 20 preceding trading days
- Current trading day and the 30 preceding trading days
- Current trading day and the 45 preceding trading days
- Current trading day and the 60 preceding trading days
- Current trading day and the 90 preceding trading days.

By default, a targeted invitation notification is sent to traders at qualifying Members where the recipient trader meets any of the following criteria:

- **Opposite-side indication in Liquidnet.** Liquidnet received an opposite-side indication from the recipient at any time during the look-back period, where the available quantity was at least the minimum matching and negotiation size for the applicable region, as set forth in the trading rules.
- **Opposite-side indication placed away.** The recipient has or had an opposite-side indication in its OMS at any time during the look-back period where the quantity placed at other brokers is or was at least the minimum matching and negotiation size for the applicable region, as set forth in the trading rules.
- **Opposite-side execution in Liquidnet.** The recipient executed in Liquidnet with anyone at any time during the look-back period, where the recipient executed on the opposite-side to the sender's order (for example, the recipient executed a buy order and the sender's targeted invitation is for a sell order) and the recipient's execution quantity was at least the minimum matching and negotiation size for the applicable region, as set forth in the trading rules.
- **Executed against sender.** The recipient executed in Liquidnet against the sender at any time during the look-back period, where the execution quantity was at least the minimum matching and negotiation size for the applicable region, as set forth in the trading rules.
- **Invited the sender.** The recipient sent the sender a negotiation invitation or targeted invitation notification at any time during the current trading day.

All targeting criteria are applied for the specific stock. The foregoing is subject to the exceptions described below.

Traders with same-side indications

A trader is not eligible to receive a targeted invitation notification in a symbol if the trader had at least one same-side indication in the symbol (a) in the same trading period as its most recent opposite-side indication or (b) in a more recent trading period than its most recent opposite-side indication. This rule only applies to same-side indications during the following trading periods:

- Current trading day
- Prior trading day
- 2-5 five trading days prior
- 6-10 trading days prior
- 11-15 trading days prior
- 16-20 trading days prior

As examples:

- A sender elects a look-back period of the current trading day and the 10 preceding trading days. A trader's most recent same-side indication in a symbol was eight trading days prior; the

trader's most recent opposite-side indication in the symbol was six trading days prior. The trader is not eligible to receive a targeted invitation notification in the symbol.

- A sender elects a look-back period of the current trading day and the 10 preceding trading days. A trader's most recent same-side indication in a symbol was eight trading days prior; the trader's most recent opposite-side indication in the symbol was five trading days prior. The trader is eligible to receive a targeted invitation notification in the symbol (subject to meeting the other criteria as described in this section).
- A sender elects a look-back period of the current trading day and the 30 preceding trading days. A trader's most recent same-side indication in a symbol was 25 trading days prior. The trader is eligible to receive a targeted invitation notification in the symbol (subject to meeting the other criteria as described in this section).

Restricting the criteria for who can receive a targeted invitation notification

Through the desktop application, a trader can restrict the recipients of a two-way targeted invitation notification to recipients that meet either or both of the following criteria, as described above:

- Executed against sender
- Invited the sender.

Targeted invitations not available where a match or broker block opportunity exists

A trader can only create a two-way targeted invitation based on an unmatched indication. A trader cannot create a two-way targeted invitation or receive a targeted invitation notification on a stock where the trader has a matched indication in the Liquidnet negotiation system or has received notification of a broker block opportunity in Liquidnet H2O.

Hours of availability

A trader can only create a targeted invitation during the regular trading hours of the primary listing market for the applicable country.

Order details for a targeted invitation

For any targeted invitation, a sending trader must specify the following:

- **Quantity.** The quantity of a two-way targeted invitation defaults to the trader's working quantity on the indication. Quantity cannot be greater than the working quantity on the indication and cannot be less than the minimum matching and negotiation size for the applicable region, as set forth in the trading rules or the default minimum execution size (as set forth in the next bullet).
- **Minimum execution size.** For US equities, the default minimum execution size for a two-way targeted invitation order is the lesser of 25,000 shares and 15% of ADV. The minimum execution size for a two-way targeted invitation order cannot be greater than the working quantity on the indication and cannot be less than the default value set forth in this bullet or the minimum matching and negotiation size for the applicable region, as set forth in the trading rules.

- **Limit price.** At the time that a two-way targeted invitation is first sent, the limit price specified by a sender must be at or above the current mid-price, in the case of a buy targeted invitation, or at or below the current mid-price, in the case of a sell targeted invitation.
- **Maximum number of recipients.** A sender can select a maximum number of recipients for a two-way targeted invitation notification. Where the number of qualifying recipients exceeds the maximum number of recipients specified by the sender, Liquidnet prioritizes the recipients based on pre-set criteria, as described below.
- **Time-in-force.** A sender must specify a time-in-force for a two-way targeted invitation, which cannot be less than one minute. A targeted invitation expires upon the earlier of (i) expiration of the specified time-in-force, and (ii) the end of the current trading day. A trader may cancel a two-way targeted invitation prior to the expiration of the specified time-in-force period. Expiration (or cancellation) of a two-way targeted invitation results in the expiration (or cancellation) of the applicable targeted invitation notification and order. Liquidnet may terminate a Member's participation in two-way targeted invitation functionality based on repeated cancellations. If a Member has upgraded to Liquidnet 5.3, a trader at the Member firm can elect to have a two-way targeted invitation order automatically cancelled when all recipients have dismissed the targeted invitation notification.

Prioritization of recipients

Where the number of qualifying recipients exceeds the maximum number of recipients specified by the sender, Liquidnet prioritizes the recipients based on a set of prioritization rules that Liquidnet may update from time-to-time. Liquidnet maintains and provides to Members upon request the details regarding these prioritization rules.

Notification to sender

A sender is notified if there are no qualifying recipients for a two-way targeted invitation.

Receiving a targeted invitation notification

A targeted invitation notification is notified to a qualifying recipient through the Liquidnet desktop application. The notification includes the sender's minimum execution size, but the recipient must take an action through the desktop application to view the sender's minimum execution size. A recipient is further made aware through the Liquidnet desktop application when a targeted invitation expires.

A recipient is notified through the desktop application if the sender's limit price is away from the mid-price (i.e., above the mid-price in the case of a targeted invitation sent by a seller or below the mid-price in the case of a targeted invitation sent by a buyer). If the limit price of a two-way targeted invitation is away from the mid-price at a specific time and is still away from the mid-price 10 seconds after that, Liquidnet will provide the sender a notification to either adjust his or her limit price for the targeted invitation or cancel the targeted invitation.

Responses by recipient

A recipient has the following two options upon receipt of a targeted invitation notification:

- Notify the sender that the recipient is interested and request more time to respond to the targeted invitation
- Dismiss the notification.

If a trader dismisses a notification in a symbol, the trader cannot receive another targeted invitation notification for that symbol for the rest of that trading day, but the trader can send a targeted invitation in that symbol.

A recipient also can take any other action permitted by the trading rules, including the creation of an opposite-side indication or order.

Information received by the sender

A sender of a two-way targeted invitation is notified when a recipient indicates interest and requests more time. If a trader elects to have his or her two-way targeted invitation order automatically cancelled when all recipients have dismissed the targeted invitation notification, the trader can determine that all of the targeted invitation notifications sent by the sender have been dismissed by any recipients.

Trader grouping functionality

The trader grouping functionality described herein also applies for targeted invitations. For example, if a trader is designated in a group, the trader can receive a notification based on an indication or execution of another trader in the group. Through the desktop application, a trader can set his or her grouping for targeted invitations separately from his or her grouping for indications.

Liquidnet Sales coverage

A Liquidnet Relationship Manager (RM) is notified through Sales Dashboard (a Liquidnet Sales support tool) if a Member the RM covers sends a targeted invitation; the RM for the sender is also notified of any recipients. An RM is also notified if a Member the RM covers receives a targeted invitation notification; the sender is also identified to the recipient's RM. The RMs for the sender and recipient are further notified if a recipient takes an action through the desktop application to view the minimum execution size or request more time or if a recipient dismisses the targeted invitation notification. These notifications to RMs do not include any symbols.

E. Editing a two-way targeted invitation

Through the desktop application, a trader can edit any of the following fields of a two-way targeted invitation:

- Quantity
- Minimum execution size
- Limit price.

F. Disabling targeted invitation functionality for certain US equities

For US equities, targeted invitation functionality is disabled for any stock where the Liquidnet Negotiation and H2O ATSs combined have executed 5% or more of market volume during four of the preceding six calendar months.

G. Liquidity Watch and surveillance for targeted invitations

Liquidnet can disable targeted invitations functionality for a Member or customer in accordance with Liquidnet's Liquidity Watch and surveillance processes, as set forth in the trading rules.

H. One-way targeted invitations

Roll-out of one-way targeted invitations

Liquidnet has introduced, and will continue to introduce, targeted invitation functionality for LN auto-ex orders and for the following types of Liquidnet algo orders: Liquidnet Only; Liquidnet Dark; Barracuda; VWAP; TWAP; POV and IS. This functionality applies to these types of Liquidnet orders, whether firm or conditional. Liquidnet refers to this functionality as "one-way targeted invitations".

One-way targeted invitations will be made available for all equities other than Canadian and Indian equities.

Liquidnet has introduced, and intends to continue to introduce one-way targeted invitations through a series of releases over a period of time. Introduction of this functionality is based on the method through which a user enters orders in Liquidnet, with the current status as follows:

	Description	Status
Category 1	Liquidnet trading desk personnel (high-touch trading desk customer orders)	In pilot for US equities
Category 2	Low-touch trading desk customer orders	Commencing January 2017, subject to implementation by the applicable OMS vendor
Category 3	Algo orders created through the Liquidnet desktop application	Pilot for US equities scheduled for February 2017
Category 4	Automated routing customer orders	In pilot for US equities
Category 5	LN auto-ex orders	Pilot for US equities scheduled for February 2017

Liquidnet may introduce one-way targeted invitations in particular markets at different points in time.

Applicability of description relating to two-way targeted invitations

The provisions of Section 5.D above relating to targeted invitations that do not specifically reference two-way targeted invitations are also applicable to one-way targeted invitations, except as otherwise set forth in this Section 5.H.

One-way targeted invitations for low-touch orders from customers

For low-touch orders (whether from trading desk or automated routing customers), subject to the customer's consent (as described below), Liquidnet can send targeted invitation notifications to Members that are qualifying recipients. Liquidnet applies the following default configurations for these notifications:

- Maximum number of recipients – 10
- Look-back period – 20 days
- Minimum execution size – as set forth in Section 5.D
- Time-in-force – the same as the associated order in Liquidnet H2O.

Liquidnet may change the default maximum number of recipients from time-to-time within a range of five (5) and twenty (20), subject to posting prior notification on the Member website. Liquidnet similarly may change the default look-back period from time-to-time within a range of five (5) and 45 days, subject to posting prior notification on the Member website.

Upon request by a Member, Liquidnet can adjust these default configurations to any of the following:

- Maximum number of recipients – any number
- Look-back period – any look-back period provided for in Section 5.D
- Minimum execution size – must always be the minimum execution size for targeted invitations as set forth in Section 5.D.
- Time-in-force – must always be the same as the associated order.

Any configuration above for a Member or customer applies to all one-way targeted invitations sent by the Member or customer.

One-way targeted invitations for high-touch orders from customers

For high-touch orders, subject to the customer's consent (as described below), a Liquidnet trader can elect to authorize Liquidnet to send targeted invitation notifications for a particular order. Liquidnet applies the same default configurations, and permits adjustment of configurations, as described in the section above on one-way targeted invitations for low-touch orders from customers.

Targeted invitations for Member orders created through the desktop application

For orders created by a Member through the desktop application (whether algo or LN auto-ex orders), the Member (through the consent process described below) can authorize Liquidnet to send one-way targeted invitation notifications to other Members that are qualifying recipients. Liquidnet applies the same default configurations, and permits adjustment of configurations, as described in the section above on one-way targeted invitations for low-touch orders from customers.

Consent to sending of one-way targeted invitations

Liquidnet will not send one-way targeted invitations for a Member or customer order unless consented to by the Member or customer. The consent process depends on the method through which a Member or customer transmits the associated order, as follows:

- **Low-touch orders (from trading desk or automated routing customers).** Liquidnet will identify to customers the field or tag that the customer should use to communicate to Liquidnet on an order-by-order basis whether the customer authorizes Liquidnet to send one-way targeted invitations for the specific order (referred to as the “TI instruction field”). A customer also can provide Liquidnet an instruction authorizing Liquidnet to send one-way targeted invitations for all of the customer’s orders, unless otherwise instructed by the customer for a specific order (a “blanket authorization”).

If a customer has not provided a blanket authorization, Liquidnet is authorized to send targeted invitations for an order only if the customer instructs Liquidnet to do so through the TI instruction field for the specific order.

If a customer has provided a blanket authorization, Liquidnet is authorized to send targeted invitations for any order from the customer unless the customer indicates in the TI instruction field for the order that Liquidnet should not send one-way targeted invitations for the order.

- **High-touch orders.** Liquidnet is not authorized to send one-way targeted invitations for a high-touch order unless the customer specifically authorizes Liquidnet to do so for the particular order.
- **Members (desktop application).** Liquidnet is not authorized to send one-way targeted invitations for an algo order created by a Member through the desktop application, unless the Member authorizes Liquidnet to do so through a checkbox in the order screen for the particular order. This checkbox is unchecked by default unless the Member specifically requests that Liquidnet configure the Member to have the checkbox checked by default.

Guidelines for determining when to send a one-way targeted invitation

Liquidnet does not automatically send a one-way targeted invitation for any algo or LN auto-ex order. Instead, Liquidnet applies various guidelines in determining whether and when to send a one-way targeted invitation. These guidelines only apply if the Member or customer has consented to Liquidnet sending a one-way targeted invitation.

Liquidnet applies the following guidelines in determining whether and when to send a one-way targeted invitation:

- **Remaining order size.** Liquidnet will only send a targeted invitation notification for an order if the remaining order size of the associated order is at least two (2) times the minimum execution size for targeted invitations for US equities, as set forth in Section 5.D. Liquidnet may change this remaining order size requirement for a region from time-to-time within a range of one time and two times, subject to posting prior notification on the Member website.
- **Priority for matching contra-indications.** For low-touch and Member desktop orders, Liquidnet will not send a targeted invitation notification for an order until six (6) minutes after the

Member's or customer's instruction authorizing the system to send a one-way targeted invitation. For high-touch orders, Liquidnet will not send a targeted invitation notification for an order until one (1) minute after the Liquidnet trader's instruction authorizing the system to send a one-way targeted invitation. In addition, if there is a matching contra-indication (in the negotiation system) for the sender's order at the time that is six (6) minutes (for low-touch and Member desktop orders) or one (1) minute (for high-touch orders) after the sender's authorization to send a one-way targeted invitation for of the order, the system will not send a targeted invitation notification until there is no longer a matching contra-indication in the negotiation system. The purpose for these delays is to provide time for a matching contra-indication to execute against the order that is associated with the sender's proposed targeted invitation notification. Liquidnet may change these delay periods from time-to-time within a range of zero and ten (10) minutes, subject to posting prior notification on the Member website.

Liquidnet may modify these guidelines based on its review of Member and customer usage.

Cancellation of one-way targeted invitations

Liquidnet will cancel any one-way targeted invitation notifications for an order upon the occurrence of any of the following:

- ***Remaining order size.*** The sender's remaining order size is below the minimum execution size for targeted invitations for the applicable region, as set forth in Section 5.D.
- ***Limit price.*** At a specific time and 10 seconds after that, (i) the limit price of the Member's or customer's buy order is lower than the mid-price, or (ii) the limit price of the Member's or customer's sell order is higher than the mid-price. Effective on or after January 17, 2017, the 10-second period will be increased to 30 seconds.
- ***Cancellation of associated order.*** The Member or customer cancels the associated order, and, in the case of a low-touch order, a period of three seconds has elapsed.
- ***Expiration of associated order.*** The associated order expires.

Expiration or cancellation of a one-way targeted invitation notification does not affect the related order.

Resending of a targeted invitation after a cancel

Liquidnet can resend a targeted invitation after a cancel subject to the conditions set forth above except that the six-minute period described above runs from the most recent cancel of the targeted invitation.

No notifications to senders of one-way targeted invitations

A sender of a one-way targeted invitation is not notified of any of the following:

- Whether or not there are any qualifying recipients
- When a recipient indicates interest or requests more time
- When all recipients have dismissed the targeted invitation notification.

Targeting criteria

All targeting criteria described in Section 5.D apply to targeted invitations described in this Section 5.H.

6. Negotiation functionality

A. Liquidnet Negotiation ATS

Negotiation functionality is provided through the Liquidnet Negotiation ATS.

B. Indication matching functionality

Election to participate

Members can elect whether or not to participate in Liquidnet's negotiation functionality. If a Member elects to participate, Liquidnet the broker transmits indications received from the Member to Liquidnet's indication matching engine.

Contras

When a trader has an indication in Liquidnet that is transmitted to Liquidnet's indication matching engine, and there is at least one other trader with a matching indication on the opposite side (a "contra-party" or "contra"), Liquidnet notifies the first trader and any contra. A matching indication (or "match") is one that is in the same equity and instrument type and where both the trader and the contra are within each other's minimum tolerance quantities. Members cannot be matched with opposite side orders having the same Member ID.

Setting indications of liquidity to outside

A trader may set an indication to "outside," which makes the indication ineligible for Liquidnet's indication matching engine. Indications that are eligible for Liquidnet's indication matching engine are considered "in the pool".

Upon request, Liquidnet can configure a Member's indications to be automatically set to outside if the Member does not take an action on a match of the indication within a specified period of time after commencement of the match, as directed by the Member. Liquidnet now implements this configuration with an exception where the Member previously executed with one or more of the contras on the indication.

Price alerts

When a trader sets an indication to outside, the trader can set a price alert. The alert notifies the trader when the price set for the indication is back in the market.

Matches

Liquidnet determines matches based on the security IDs provided by each Member. Liquidnet only matches buy and sell indications for a security if they are of the same instrument type.

Matching indications with OMS limits

At present, during regular trading hours in the applicable market, indications with OMS limits are eligible for matching where the limit on a buy indication is at or above the applicable reference price and the limit on a sell indication is at or below the applicable reference price. The default reference price is the mid-price, but Members can request that Liquidnet set the reference price as the bid (in the case of a buy indication) and the offer (in the case of a sell indication).

Liquidnet allows matching of indications pre-open or at market open for US equities based on the following reference prices in the applicable stock:

- If there is a valid best bid and best offer in the market, the applicable reference price for the Member, as described above (mid-price, bid or offer, as applicable)
- If a valid best bid and best offer is not available, last sale price
- If a valid best bid and best offer and last sale price are not available, most recent closing price.

Match pop-ups

In addition to a standard match notification, the System provides a larger alert to the trader on each side upon commencement of a match (also referred to as a “match pop-up”). A trader can close a match pop-up at any time. A trader also can request that Liquidnet disable all match pop-ups for the trader. Through sales dashboard, an RM can request the refresh of a match pop-up, which has the following effect: (i) if the trader has previously closed the pop-up for that match, the System will send another match pop-up to the trader; and (ii) if the trader has not previously closed the pop-up and the pop-up is no longer visible to the trader because it is hidden behind another screen on the trader’s desktop, the System will attempt to make the pop-up visible to the trader.

C. Minimum quantity for matching and negotiation (tolerance)

Minimum match quantity

Liquidnet does not match two contra-side indications unless each indication meets the following minimum quantity requirement for US equities:

- least of 5,000 shares, 5% of ADV and US\$200,000

The minimum quantity for matching of an indication does not apply to a continuing negotiation with the same contra after a partial execution of the indication with that contra. The minimum quantity for matching is in addition to the current tolerance conditions that Liquidnet applies.

Tolerance

A trader is matched with a contra only if the working quantity of each trader is at or above the other trader’s minimum tolerance quantity (or “tolerance”). A trader’s tolerance on an indication represents the minimum working quantity in shares that a contra must have for the trader to be matched against that contra. Tolerance is intended to protect a trader from being matched and negotiating with a contra whose working quantity is too small.

A trader's tolerance on an indication equals the lowest of the following three quantities:

- **Working quantity tolerance.** The trader's working quantity on the indication multiplied by the trader's working quantity tolerance percentage.
- **ADV tolerance percentage.** The ADV of the stock multiplied by the trader's ADV tolerance percentage.
- **Default maximum tolerance.** The default maximum tolerance for the applicable region, as described below.

Working quantity and ADV tolerance percentages

The system sets separate default working quantity and ADV tolerance percentages of 10% for each trader. Through the Liquidnet desktop application, a trader can adjust his or her default working quantity tolerance percentage or default ADV tolerance percentage, or each of them, to a different percentage, ranging from 1% to 25%. The default tolerance percentages apply to all of a trader's indications, unless the trader overrides the defaults for a specific indication (as described below).

A trader can also request that Liquidnet disable ADV tolerance, in which case ADV tolerance does not apply to the trader's indications.

Maximum tolerance

Liquidnet defaults each Member's maximum tolerance for US equities to 50,000 shares.

Members have the following options with respect to maximum tolerance:

- For each country, a Member can determine whether a maximum tolerance should be applied.
- If a Member determines that a maximum tolerance should be applied for a country, the Member can choose to keep the default maximum tolerance set by Liquidnet, or the Member can choose to increase or decrease the maximum tolerance.
- If the Member wants to change the default maximum tolerance for a country, the Member can choose to set the maximum tolerance based on number of shares or based on principal value.

A Member should contact its Sales coverage or Member Services for a list of its maximum tolerances, if any, for each country, and to request any modifications, or to request that a maximum tolerance be enabled or disabled. Maximum tolerances are set at the Member level.

Adjusting tolerance for an indication

A trader can adjust his or her tolerance for an indication through the Liquidnet desktop application by taking any of the following actions for the indication:

- Adjusting the tolerance share number
- Adjusting the tolerance principal value
- Adjusting the working quantity tolerance percentage
- Adjusting the ADV tolerance percentage.

If the trader adjusts any of these parameters, the system will use that parameter as the trader's tolerance, except that the tolerance cannot exceed 25% of the trader's working quantity on the indication or 25% of ADV (unless the trader has disabled ADV tolerance for all indications). If a trader adjusts a parameter and the adjustment does not cause the trader's working quantity to exceed 25% of working quantity (and 25% of ADV, where applicable), and a subsequent execution or other event causes the adjusted tolerance value to exceed 25% of the trader's working quantity, the system will compute the trader's tolerance based on his working quantity (and, where applicable ADV) tolerance percentages that were in place prior to the tolerance adjustment.

Examples of how tolerance works

The following scenarios illustrate how the rules above apply for an indication.

Scenario 1

- Member A has set a working quantity percentage of 10% and an ADV percentage of 10%.
- Trader A works for Member A and does not override the percentages set by his firm.
- Trader A has an indication for 800,000 shares in a US equity.
- The ADV in the stock is 700,000 shares.
- Member A has instructed Liquidnet not to apply a maximum tolerance for US equities.
- **Result:** Trader A will only be matched with a contra if the contra has a working quantity of 70,000 shares:
 - Working quantity (800,000 shares) x working quantity percentage (10%) = 80,000 shares
 - ADV (700,000 shares) x ADV percentage (10%) = 70,000 shares
 - Lesser of working quantity tolerance (80,000 shares) and ADV tolerance (70,000 shares) = 70,000 shares.

Scenario 2

- Same as Scenario 1, except that Member A applies the default maximum tolerance for US equities, which is 50,000 shares.
- **Result:** Trader A will only be matched with a contra if the contra has a working quantity of 50,000 shares:
 - Working quantity (800,000 shares) x working quantity percentage (10%) = 80,000 shares
 - ADV (700,000 shares) x ADV percentage (10%) = 70,000 shares
 - Maximum tolerance of 50,000 shares
 - Least of working quantity tolerance (80,000 shares), ADV tolerance (70,000 shares) and maximum tolerance (50,000 shares) = 50,000 shares.

Scenario 3

- Same as Scenario 1, except that Trader A has disabled ADV tolerance through the Liquidnet desktop application.
- **Result:** Trader A will only be matched with a contra if the contra has a working quantity of 80,000 shares:
 - Working quantity (800,000 shares) x working quantity percentage (10%) = 80,000 shares

- ADV tolerance – not applicable
- Maximum tolerance – not applicable.

Scenario 4

- Same as Scenario 2, except that Trader A uses the desktop application to decrease his share tolerance from 50,000 to 30,000 shares.
- **Result:** Trader A will only be matched with a contra if the contra has a working quantity of 30,000 shares. Trader A's change overrides the other tolerance parameters.

Scenario 5

- Same as Scenario 2, except that Trader A uses the desktop application to increase his share tolerance from 50,000 to 200,000 shares.
- **Result:** The system will only allow Trader A to increase his tolerance to 175,000 shares.
 - Working quantity (800,000 shares) x maximum working quantity percentage (25%) = 200,000 shares
 - ADV tolerance (700,000 shares) x maximum ADV tolerance percentage (25%) = 175,000 shares
 - Maximum tolerance – overridden.
 - Lesser of working quantity tolerance (200,000 shares) and ADV tolerance (175,000 shares) = 175,000 shares.

Minimum match quantity requirement

In all cases, a match only occurs if each side meets the minimum match quantity requirement for the applicable region, as described above.

Adjusting tolerance during a match

A trader can decrease, but cannot increase, his or her tolerance during a match.

Tolerance after an initial trade is executed

After an initial trade is executed on an indication, if the trader has any residual amount left to trade on that indication, tolerance for the indication will vary depending on which of the following three configurations are implemented for the Member:

- A zero tolerance will apply for all contras
- A zero tolerance will apply for the contra-firm with which the trader executed, but the trader's original tolerance settings will apply to all other contras
- The trader's original tolerance settings will continue to apply to all contras, including the contra-firm with which the trader executed.

A Member can change this configuration at any time upon notice to Liquidnet.

D. Matching on placed orders

Member firms that meet certain criteria may be configured to match with other Liquidnet contras based on a quantity that includes shares already placed at other trading venues. Liquidnet monitors Members with this configuration for usage in alignment with Member community protocols.

Liquidnet supports two different implementations for matching on placed orders. Both implementations require a manual action by the trader at the Member firm. One implementation requires the Member firm to manually update the OMS to free up shares placed at the other trading venues before submitting a bid or offer in a Liquidnet negotiation. The second implementation allows a Member to enter a Liquidnet negotiation for shares placed at other trading venues. After an execution, the Member must free up the shares in the OMS.

Members that are configured to match on placed orders can set filters so they do not match when they have executed a specified percentage of the parent OMS order away from Liquidnet that day and the remaining quantity on the order is below a specified percentage of the 30-day historical ADV for the stock.

E. Active, passive and outside status

Active and passive status

An indication that is in the pool can have a status of passive or active. Unless otherwise configured for a trader, all indications have an initial default status of passive. A trader can indicate that he is ready to receive an invitation to negotiate by changing the status of his indication from passive to active. This is also known as “going active.” The indication that is made active is known as an “active indication.” The active status is displayed to the contras on a match. Going active is not a binding bid or offer.

Active by default

Traders have the option of making indications active by default by contacting Liquidnet Product Support.

Manually changing status from outside

A trader can manually change the status of an indication from outside to active, but not from outside to passive.

Carrying over status to the next trading day

Liquidnet makes available to Members a configuration where the status of the Member’s indications (active, passive or outside) are carried over to the next trading day.

Defaulting indications to outside

Liquidnet makes available to Members various configuration rules that default specific types of indications to outside. These rules can include, for example, defaulting to outside: indications with market-on-open instructions; indications with market-on-close instructions; or indications that are part of a portfolio or program list.

F. Ordering of contras

Liquidnet lists active contras based on time priority (when the contra went active), except that the contra that represents the Liquidnet negotiation contra (or LNC, described below) is listed above other contras. By default, a Member's invitation is sent to the contra that is listed first, but a Member can override this default by selecting a different contra prior to sending an invitation.

The ordering rules in the preceding paragraph are subject to the exception set forth in this paragraph. If a mid-peg invitation sent by a trader (Trader 1) is above the tolerance of a contra (Trader 2) and missed or declined by Trader 2 (or expires), (i) Trader 1 will be the only contra displayed to Trader 2 as active for a period of 30 seconds (and, thus, the only contra to whom Trader 2 can send an invitation during that period), and (ii) a trader at another Member firm will not see Trader 2 as active during this 30-second period (and, thus, cannot submit a proposal to Trader 2 during this 30-second period). The 30-second period is reduced to 10 seconds when Trader 2 declined the invitation from Trader 1 and specified the reason as "Explicit Price Only."

G. Functionality to automatically convert un-matched indications from active to passive under certain circumstances after set time period

At present, Liquidnet defaults each Member's active indications to convert to passive in either of the following circumstances:

- 180 seconds after a match breaks
- 180 seconds after a Member makes an un-matched indication active, providing that indication remains un-matched.

Members can override these default configurations upon notice to Liquidnet.

Members can choose to be configured to convert active indications to passive if the mid-point increases (or decreases) by 35 basis points or more from the time that a Member went active on a buy (or sell) indication.

H. Negotiations

Starting a negotiation; sending an invitation

When Liquidnet notifies a trader of one or more active contras for a security, the trader can start a negotiation for that security by selecting a contra, specifying a price and negotiation quantity, and submitting a bid or offer. This is also known as "sending an invitation." When a trader sends an invitation in response to an active indication, he is making a firm bid or offer. A trader can only send an invitation on any match to one contra at a time. If a trader sends an invitation when the status of his or her indication is passive, the status of the trader's indication is converted to active. A trader can only send an invitation to a contra that is active.

Negotiation quantity

“Negotiation quantity” is the quantity set by a trader when he makes a bid, offer, counter-bid or counter-offer or agreed to by a trader when he accepts a bid, offer, counter-bid or counter-offer. A trader’s negotiation quantity defaults to his working quantity at the start of a negotiation, but the trader can modify his negotiation quantity before submitting a bid, offer, counter-bid, or counter-offer.

Bids and offers (proposals)

Liquidnet negotiations are anonymous one-to-one negotiations through which traders submit bids and offers to each other. The first bid or offer in a negotiation is submitted when one trader opens the negotiation room and sends an invitation. Subsequent bids and offers may be submitted as counter-bids or counter-offers in the negotiation. “Bids and offers” are sometimes referred to as “proposals”. An invitation is a type of proposal.

A trader (or a group of traders, as described below) may only enter into a negotiation with respect to a specific indication with one contra at a time.

Prices specified in proposals are limit prices. Proposals in Liquidnet negotiations are firm orders.

Prior to starting a negotiation, submitting a proposal, or taking any other action in a negotiation, a trader should confirm that the price and quantity and other information relating to that action accurately reflect the trader’s and the Member’s intended action. In particular, the trader should confirm that the proposal price is within any limit price set by the Member and within any price and quantity limits set in the Member’s OMS. Traders should be aware that Liquidnet does not update available quantity or working quantity for changes in OMS order quantity once a negotiation has commenced.

Priced, mid-peg and closing proposals

There are three types of negotiation proposals: priced; mid-peg; and closing price. A priced proposal has an associated price displayed to the contra and can only be executed at the indicated price. A mid-peg proposal does not have an associated price. A mid-peg proposal, if accepted, is executed at the mid-price at the time of execution. A closing price proposal, if accepted, is executed at the closing price for the stock. The closing price for a stock is determined by reference to the applicable market data feed sourced by Liquidnet. A closing price proposal cannot be executed if the execution price is more than 1.5% away from the mid-point as of the time of execution.

Prior to the open of trading in a country, and during the regular trading session in the primary market of the country, only priced and mid-peg proposals can be submitted during a negotiation. For US equities, after the close of the regular trading session in the primary market, only closing price proposals can be submitted.

Responding to an invitation

When a trader sends an invitation, the contra may open the negotiation room or decline to negotiate. Upon opening the negotiation room in response to an invitation, the contra may do any of the following:

- Accept the invitation
- Change quantity and accept

- Submit a counter-proposal
- Allow the proposal to expire by not responding within the configured time period (currently 20 or 30 seconds, as applicable)
- End the negotiation.

However, a contra cannot submit a counter-proposal in response to a mid-peg invitation.

Liquidnet has implemented functionality where a trader can accept a mid-peg invitation without first opening the negotiation room. This functionality is not implemented where inconsistent with a trader's workflow or where a trader requests that this functionality not be implemented.

On a pilot basis, certain users of Liquidnet 5.3 also have the ability to accept a priced invitation without first opening the negotiation room.

Chat

Traders can also send messages to each other during a negotiation via the chat feature. A chat message does not constitute a proposal, acceptance, cancellation or similar event. A trader cannot send a chat message along with or in response to a mid-peg proposal.

Providing reason for a decline

When declining a proposal (including a mid-peg proposal), a trader must specify a decline reason. Liquidnet provides default reasons; traders can modify the list of default reasons through the settings area of the desktop application.

Canceling a proposal

After a trader submits a proposal, he can cancel that proposal by either:

- Clicking cancel, to cancel the proposal; or
- Clicking end, to terminate the negotiation (in this situation, we encourage the trader to send a chat notice to the contra).

If a trader cancels a proposal, he can resubmit another proposal.

Counter-proposals

A trader can submit a counter-proposal in response to a priced invitation or other priced proposal by specifying a negotiation quantity and price (or mid-peg) and submitting. If a trader submits a counter-proposal, the trader receiving the counter-proposal has the same options as above upon receipt of an invitation.

Ending a negotiation

If a trader ends a negotiation, it terminates the current negotiation.

Time limit

There is a 30-second time limit for invitations and a 20-second time limit for all subsequent proposals in a negotiation. If an invitation is not accepted by the contra within 30 seconds, the invitation expires. If a subsequent proposal in a negotiation is not accepted by the contra within 20 seconds, the proposal expires.

Either trader can submit a proposal in a negotiation after one of the traders has failed to respond to a proposal within the applicable time limit. After a time expiration, if the two traders submit a proposal at the same price and within each other's tolerances, and prior to either trader receiving the other trader's proposal, the second proposal received by the Liquidnet back-end software will be treated as an accept.

The timer for any proposal starts when the Liquidnet back-end software confirms that the contra has received the proposal. Any acceptance, to be effective, must be received by the Liquidnet back-end software prior to the expiration of its 30-second (or 20-second) clock.

Proposals significantly away from the best bid and best ask

Liquidnet allows traders to trade outside the current best bid and best ask (subject to certain price restrictions required by law as described below), but Liquidnet may require a trader who submits a proposal that is significantly outside the current best bid and best ask to specifically confirm the proposal.

Minimum tolerance quantities during negotiations

A trader specifies a negotiation quantity each time he submits a proposal. A trader cannot submit a negotiation quantity that is below the trader's own minimum tolerance for the associated indication.

If the negotiation quantity submitted by a trader is below the contra's minimum tolerance quantity, Liquidnet notifies the contra that the proposal is below his tolerance. The contra then has the same options as he would have in response to any other proposal.

A trader's tolerance during a negotiation is the product of his working quantity and tolerance percentage. For example, if a trader has a working quantity of 100,000 shares and a tolerance percentage of 20%, his tolerance for the negotiation is 20,000 shares.

A trader can change his working quantity for an indication prior to a negotiation. When a negotiation starts, the working quantity is no longer updated upon a change in the OMS. A trader cannot change his available quantity for an indication.

Crossed proposals

If a trader submits a bid during a negotiation that is higher than the contra's offer, or submits an offer during a negotiation that is lower than the contra's bid, Liquidnet will treat this bid or offer as a counter-proposal.

Acceptances

A trader can accept a contra's proposal by clicking accept. A trader also can accept a proposal by submitting the same price as the price of the contra's proposal (as long as the trader's negotiation quantity is within the contra's tolerance).

Accepts after changing quantity

If a trader accepts after changing his negotiation quantity, it is treated as an accept if the trader's negotiation quantity is still above the contra's tolerance, but is treated as a counter-proposal if the trader's negotiation quantity is below the contra's tolerance.

Imputed price constraint for accept of mid-peg proposal

When a trader accepts a mid-peg proposal:

- If the accepting trader is a buyer, Liquidnet imputes a price constraint of 30 basis points above the mid displayed to the trader when the trader clicks accept
- If the accepting trader is a seller, Liquidnet imputes a price constraint of 30 basis points below the mid displayed to the trader when the trader clicks accept.

Limit price for mid-peg proposal sent during a negotiation; imputed limit price where trader does not set a limit price

When a Member provides a limit price in its OMS, Liquidnet applies that limit price to a mid-peg proposal sent by the Member during a negotiation. If the Member does not provide a limit price in its OMS, the Member can set a limit price for the associated indication through the Liquidnet desktop application (referred to as a "match limit"). In that case, Liquidnet applies the match limit to a mid-peg proposal sent by the Member during a negotiation. A trader can modify a match limit but not an OMS limit during a negotiation.

If the Member does not set an OMS limit or a match limit for an indication, Liquidnet imputes a limit price (as described in this sub-section) for execution of a mid-peg proposal. The constraints described in the preceding sub-section apply to the accepting trader; the imputed limit price described in this sub-section applies to the trader who submits a mid-peg proposal for acceptance by the contra where Liquidnet has not received an OMS limit price from the trader's OMS or a match limit.

This default limit price restricts a mid-peg proposal from being executed at a price that, in the case of a buy (or sell) proposal, is more than 35 basis points above (or below) the mid-point of the best bid and offer in the market as of the time that the submitter opened the negotiation room. Members can override the default limit price of 35 basis points for one or more countries and set a different limit price through the Liquidnet desktop application expressed as either of the following:

- Basis points from the mid-point as of the time that the submitter opened the negotiation room;
or
- Cents from the best offer in the market (in the case of a buy order) or cents from the best bid in the market (in the case of a sell order) as of the time that the submitter opened the negotiation room.

In all cases, the minimum price increments of the applicable country (or the applicable class of securities within the country) would apply, such that if the imputed limit price above is not equal to a permitted increment, the imputed limit price would be adjusted to the following:

- In the case of a buy limit price, the lowest permitted price increment above that limit price, and
- In the case of a sell limit price, the highest permitted price increment below that price constraint.

The default limit prices above are subject to the following exceptions for US equities for Liquidnet 5.4 and below users:

- If the submitting trader is a buyer, and the trader's imputed limit price is set as basis points from the start of negotiation mid, the imputed limit price will be adjusted to twenty cents above the start of negotiation best offer.
- If the submitting trader is a seller, and the trader's imputed limit price is set as basis points from the start of negotiation mid, the imputed limit price will be adjusted to twenty cents below the start of negotiation best bid.
- If the submitting trader is a buyer, and the trader's imputed limit price is set as cents from the start of negotiation best offer and is not a five-cent increment, the imputed limit price will be adjusted to the next highest five-cent increment.
- If the submitting trader is a seller, and the trader's imputed limit price is set as cents from the start of negotiation best bid and is not a five-cent increment, the imputed limit price will be adjusted to the next lowest five-cent increment.

For purposes of these exceptions:

- The mid as of the time that the trader opens the negotiation room is referred to as the "start of negotiation mid".
- The best bid as of the time that the trader opens the negotiation room is referred to as the "start of negotiation best bid".
- The best offer as of the time that the trader opens the negotiation room is referred to as the "start of negotiation best offer".

These exceptions will not apply for Liquidnet 5.5 or above users.

A trader can modify a default limit price on an order-by-order basis, subject to complying with the price increment requirements of the applicable country (or class of securities of the country).

Priority and effectiveness of acceptances, cancellations, expirations and other negotiation events

The effectiveness of an acceptance, cancellation, or end request depends upon which event is first received by the Liquidnet back-end software and recorded in the Liquidnet database. Accordingly, a cancellation or end request is effective over an acceptance if the Liquidnet back-end software receives and records in the Liquidnet database the cancellation or end request prior to the receipt and recording of the acceptance; conversely, an acceptance is effective over a cancellation or end request if the Liquidnet back-end software receives and records in the Liquidnet database the acceptance prior to the

receipt and recording of the cancellation or end request. An effective acceptance received and recorded as set forth above constitutes an executed trade in Liquidnet.

All proposals, cancels, modifications, counter-proposals, and acceptances are deemed effective when they are received and recorded by the Liquidnet back-end software, and are not effective until such time.

Execution quantity

When an acceptance is effective in accordance with the preceding section, a trade is executed for the lesser of the two parties' negotiation quantities, except that all negotiations for US equities are subject to a minimum execution quantity equal to the minimum match quantity for US equities designated by Liquidnet. However, in the case of a continuing negotiation after a partial execution, the minimum execution quantity for negotiations will be the lesser of (i) the minimum execution quantity designated by Liquidnet, and (ii) the remaining unexecuted quantity of the side with the lower remaining unexecuted quantity. In all cases, an execution cannot be less than the minimum execution size as mandated by any regulation for the applicable jurisdiction.

Confirming messages

When a trader submits a proposal or other instruction during the negotiation process, the trader should receive a message in the negotiation room dialog box confirming the trader's instruction. The trader should contact Liquidnet Member Services promptly if he fails to receive a prompt confirming message or if the trader has a question about the confirming message.

Members and traders should contact Liquidnet Member Services promptly if they believe an error, failure or delay in transmission or receipt of a proposal, acceptance, confirmation or other negotiation event has occurred. Liquidnet Member Services will promptly respond to the Member or trader.

A trader should not exit the negotiation room after an accept until the effectiveness of the acceptance has been confirmed back to the trader in the negotiation room dialog box.

Groups of traders

A Member, through its OMS, assigns orders to individual traders. In the Liquidnet System, the Member can request that traders be designated in a group. If a trader is designated in a group, the trader can negotiate trades for indications of another trader in the group. However, at any time, only one trader within a group can negotiate with respect to an OMS order that has been transmitted to Liquidnet as an indication. In a group situation, traders should coordinate with other traders in the group.

Closing price proposals

After the close of the regular session of trading in the primary market of the applicable country, the only type of proposal that can be submitted during a negotiation is a closing price proposal.

Continuing negotiations

After a trade is executed, the participants can continue to negotiate and execute trades with respect to the same security as long as they each have a remaining working quantity, even if one trader's remaining quantity is below the contra's minimum tolerance quantity.

In a continuing negotiation, either party can submit a proposal.

In a continuing negotiation, the negotiation quantity for each trader defaults to the lesser of the trader's negotiation quantity at the time of execution and the trader's current working quantity.

In a continuing negotiation, if the two traders submit proposals at the same price and within each other's tolerances, and prior to either trader receiving the other trader's proposal, the second proposal received by the Liquidnet back-end software will be treated as an accept.

Long name and other security information displayed in negotiation room

During a negotiation, Liquidnet posts the "long name" for the security in the negotiation room. The long name is provided by Reuters. Liquidnet also displays in the negotiation room the applicable exchange and currency for the security that is being negotiated. The purpose of displaying this information is to identify the security that is being negotiated and the settlement country and currency. When entering a negotiation, a trader should confirm that the long name, applicable exchange and currency are accurate; the trader should contact Liquidnet Member Services if he has any questions about the security that is being negotiated or the long name description, market, or currency that is displayed before proceeding with the negotiation.

I. Auto-negotiations

Background on auto-negotiations and the LNC

A Liquidnet algo, LN auto-ex or automate negotiation order can transmit all or a portion of the order as an indication eligible for matching through the Liquidnet indication matching engine. When such a match occurs, the indication associated with the Liquidnet algo, LN auto-ex or automate negotiation order is represented as an active indication to the contra trader with an indication (sometime referred to as the "manual contra").

In this situation, the Liquidnet software can negotiate on behalf of the trader with the Liquidnet algo, LN auto-ex or automate negotiation order. The feature of the negotiation functionality that performs this negotiation is referred to as the "Liquidnet negotiation contra" or "LNC". The functionality is referred to as "auto-negotiation".

Consistent with Liquidnet's negotiation functionality, a manual contra can only negotiate with one contra on a match; the contra to the manual contra could be another manual negotiator or the LNC, negotiating on behalf of one or more traders that have created Liquidnet algo, LN auto-ex or automate negotiation orders.

The LNC only can negotiate with one manual contra at any time with respect to any match.

Prior to the LNC commencing or entering into an auto-negotiation, the related Liquidnet algo or LN auto-ex order is canceled from Liquidnet H2O. The Liquidnet algo, LN auto-ex or automate negotiation order can be resumed in Liquidnet H2O upon termination of the auto-negotiation.

The LNC will only execute in accordance with the price constraint instructions of the trader who created the Liquidnet algo, LN auto-ex or automate negotiation order.

LNC or manual contra can commence a negotiation

A negotiation can be commenced by the LNC (if the manual contra is active) or by the manual contra.

Negotiation commenced by the LNC

If the manual contra is active, the LNC can send a mid-peg proposal to the manual contra. In response, the manual contra has the same options as it does upon receipt of a mid-peg proposal from another manual contra (as described above).

Negotiation commenced by the manual contra

The manual contra can send an invitation to the LNC, either as a mid-peg proposal or a priced proposal.

If the manual contra sends a mid-peg proposal, the LNC can enter into the negotiation room and accept on behalf of the trader who created the Liquidnet algo, LN auto-ex or automate negotiation order (subject to the execution price being within the price constraints of the manual contra and the LNC).

If the manual contra sends a priced proposal:

- If the proposal is at or better than the mid (from the perspective of the LNC), the LNC can enter into the negotiation room and accept on behalf of the trader who created the Liquidnet algo, LN auto-ex or automate negotiation order.
- If the proposal is worse than the mid (from the perspective of the LNC), the LNC can enter into the negotiation room and respond to the manual contra with a mid-peg proposal. In response to the LNC's mid-peg proposal, the manual contra has the same options as it does upon receipt of a mid-peg proposal from another manual contra (as described above).

Prioritization where the LNC represents multiple contras

Where the LNC represents multiple contras, Liquidnet 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.

Automate negotiation instruction

Members notified of a match can provide an automate negotiation instruction. With this instruction, which represents a firm order, the LNC can negotiate on behalf of the Member. In addition, the Member's order can interact in Liquidnet H2O against other Member and customer orders but not against orders from LPs. A Member providing an automate negotiation instruction can designate an

expiration time or condition through the Liquidnet desktop application. Please refer to Part V of the trading rules for additional detail.

Additional detail on auto-negotiation; ability of RMs to reset the auto-negotiation functionality

When a Member or customer creates a Liquidnet algo, LN auto-ex or automate negotiation order, depending on the order type and parameters, all or a portion of the order can be submitted to match for potential negotiation with a manually negotiating contra. If the manual contra is active, the Liquidnet system can send an invite to the manual contra and automatically negotiate on behalf of the Member or customer that created the Liquidnet algo, LN auto-ex or automate negotiation order. Liquidnet will send an invite in an attempt to engage the manual contra. In certain scenarios, after a failed attempt, the system will stop sending invites to the manual contra. Failed attempts could result from the manual contra declining or missing the invite or the limit on the Liquidnet algo, LN auto-ex or automate negotiation order going out of market before the manual contra responds to the invite. A Member can request a configuration whereby the Member would continue to receive invites until the Member declines the invite or exits the negotiation.

Through Sales Dashboard, an RM can reset the auto-negotiation functionality, which results in the Liquidnet system sending an additional invite to the manual contra, provided that the manual contra is still active, the Liquidnet algo, LN auto-ex or automate negotiation order is still within the parameters (limit and quantity) to send an invite, and certain additional conditions are met.

An RM has no ability to modify the parameters of a Liquidnet algo, LN auto-ex or automate negotiation order.

Priority for manual contra in interacting with Liquidnet algo orders

If a Member or customer creates a Liquidnet algo or LN auto-ex order, and a manual contra has a matching indication against that Liquidnet algo or LN auto-ex order, the manual contra will have a designated time period to initiate a negotiation with the Liquidnet algo or LN auto-ex order before the Liquidnet algo or LN auto-ex order can execute against LP liquidity. After the designated time period, the manual contra can continue to interact with the Liquidnet algo or LN auto-ex order, but the Liquidnet algo or LN auto-ex order also can interact with other liquidity.

7. Liquidnet H2O execution functionality

A. Liquidnet H2O ATS

Liquidnet H2O execution functionality is provided through the Liquidnet H2O ATS.

B. Liquidnet algo, LN auto-ex and automate negotiation orders; LP IOC and resting orders; and Member block accepts

Liquidnet H2O involves four types of orders:

- Liquidnet algo orders created by Members, customers, automated routing customers, or the Liquidnet trading desk, and LN auto-ex and automate negotiation orders created by Members
- LP IOC orders transmitted by liquidity partners (LPs)

- LP resting orders transmitted by LPs
- Accepts by Members in response to notification of a broker block opportunity (referred to as “Member block accepts”).

US liquidity partners (LPs) can create algo orders that interact with Liquidnet H2O as resting orders and also may interact with external venues. These algo orders do not interact with the Liquidnet negotiation system.

Liquidnet H2O handles all auto-executions described in this section.

C. Execution price

All executions in Liquidnet H2O are executed at the mid-price.

D. Execution, cancellation and editing of Liquidnet algo and LN auto-ex orders in Liquidnet H2O

A Liquidnet algo or LN auto-ex order in Liquidnet H2O can only execute against another Liquidnet algo or LN auto-ex order or against an LP IOC or resting order. An automate negotiation order in Liquidnet H2O can only execute against another Liquidnet algo or LN auto-ex order.

A Liquidnet algo, LN auto-ex or automate negotiation order only executes in Liquidnet H2O if the execution price is within the price constraints of the Liquidnet algo, LN auto-ex or automate negotiation order and the contra’s Liquidnet algo, LN auto-ex, automate negotiation or LP order.

Liquidnet H2O only executes Liquidnet algo, LN auto-ex and automate negotiation orders in round lots.

The quantity of any execution is the lesser of the quantity of the Liquidnet algo, LN auto-ex or automate negotiation order and the quantity of the opposite-side Liquidnet algo, LN auto-ex, automate negotiation or LP order (but rounded down to the highest round lot).

A trader can request cancellation (or edit) of a Liquidnet algo, LN auto-ex or automate negotiation order in Liquidnet H2O. Cancellation (or edit) is effective upon receipt and processing by Liquidnet’s back-end software except to the extent Liquidnet’s back-end software has previously processed an execution.

All Liquidnet algo, LN auto-ex and automate negotiation orders in Liquidnet H2O 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 for US markets). Traders should monitor open orders during the trading day and request cancellations (or edits) as appropriate.

Liquidnet H2O can execute an order in a stock when the primary market in the applicable country has opened.

E. Liquidity partners; LP IOC orders

LPs do not have access to the Liquidnet desktop application. Accordingly, they are not able to view any Liquidnet indications, nor are they able to participate in any negotiations. They can participate in Liquidnet functionality only as set forth in Part VIII of the trading rules.

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

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 (i.e., a market order), Liquidnet H2O 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).

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

F. LP resting orders

General

LPs also can transmit resting orders to Liquidnet H2O.

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 (i.e., a market order), Liquidnet H2O 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).

All LP resting orders are automatically canceled at the close of trading. An LP can cancel a resting order at any time, but LPs are expected to keep resting orders outstanding for a time period designated by Liquidnet.

Minimum order quantity

The minimum order quantity for LP resting orders is the round lot for the applicable market.

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 Liquidnet, allows the LP to rest actionable order flow in the Liquidnet 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, Liquidnet 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 Liquidnet (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.

G. Execution of LP orders

Contras to an LP order

An LP IOC order can execute against a Liquidnet algo or LN auto-ex order.

An LP resting order can execute against a Liquidnet algo or LN auto-ex order or against a Member block accepts. An LP resting order also can execute against another LP resting order.

An LP IOC order also can execute against an LP resting order.

Execution price

An LP order executes at the mid-price, but execution only occurs if the execution price is within the price constraints of the LP order and the contra's order.

Execution quantity

Liquidnet 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).

The minimum execution quantity for an LP resting order is the round lot for the applicable market, or any higher minimum execution quantity designated by the LP.

H. Liquidnet back-end software for H2O execution functionality

An execution or cancellation of a Liquidnet algo order, LP IOC or resting order or Member block accept 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.

I. Interaction of negotiation and H2O execution functionality

Shares cannot be involved in a negotiation and included in a Liquidnet algo order at the same time. If a trader commences a negotiation of shares that are included in a Liquidnet algo order, the shares in the Liquidnet algo order are cancelled prior to the trader's commencement of the negotiation.

J. Member block accepts

Notification of broker block opportunities

As described above, LPs can transmit resting orders to Liquidnet H2O. 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.

Notification is only provided to a Member when the mid-price is at or below any limit price specified by the LP for its buy resting order, or at or above any limit price specified by the LP for its sell resting order.

If a notification is provided and the mid-price subsequently moves above the limit price of the LP's buy order, or below the limit price of the LP's sell order, this is indicated in the notification to the Member.

Minimum quantity for notification of broker block opportunities

Members only receive notification of a broker block opportunity if the broker block opportunity meets (i) the tolerance of the Member's indication, and (ii) the minimum broker blocks execution quantity for US equities, as follows:

- least of 5,000 shares, 5% of ADV and US\$200,000

A Member also receives notification of a broker block opportunity if two or more LPs in the aggregate have opposite-side quantity that meets the applicable minimum notification quantity as described in this sub-section.

Creation and execution of Member block accepts

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

The execution price of a Member block accept cannot be higher than the mid-price as of the time that the Member submits a buy Member block accept or lower than the mid-price as of the time that the Member submits a sell Member block accept. During the time-in-force period, the Member block accept can execute against any contra-side orders in Liquidnet H2O. The Member block accept will not execute against the LP resting order for which the notification has been sent if the LP resting order has been previously canceled or executed in full.

Execution of a Member block accept is for the lesser of the quantity of the Member's block accept and the LP resting order for which the notification has been sent, subject to meeting the tolerance of the Member's indication and the minimum broker blocks execution quantity for US equities, as set forth above.

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.

A Member block accept also can execute against any other contra-side resting orders in Liquidnet H2O.

Executions of Member block accepts against LP resting orders occur in the Liquidnet H2O system.

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, Liquidnet 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.

K. Execution priority for Liquidnet H2O orders

Execution priority based on type of contra-order

Orders in Liquidnet H2O are prioritized for execution based on type of order as follows:

- ***Execution against Member and customer orders.*** As a first priority, an order transmitted to Liquidnet H2O (the transmitted order) will execute against a contra-side algo, LN auto-ex or automate negotiation order from a Member or customer (whether firm or conditional) that is resting in Liquidnet H2O 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 Liquidnet H2O 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 Liquidnet H2O 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 Liquidnet H2O based upon time priority. As noted above, the possible types of contra-orders in Liquidnet H2O consist of:
 - Member and customer algo orders, firm or conditional
 - 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 Liquidnet H2O 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 Liquidnet H2O then receives a contra-order, Liquidnet H2O 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:

- Algo and LN auto-ex orders from Members and customers (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 herein. In all cases, execution against a conditional order is subject to firm-up of the conditional

order by the contra.

L. Principal and agency orders by LPs

LPs can send principal and agency orders to Liquidnet H2O. LPs can send customer orders to Liquidnet H2O, including orders of customers of their affiliates. LPs that are exchanges also can route to Liquidnet H2O orders they have received from other markets.

The list of LPs described immediately below identifies which LPs are enabled to send principal orders to Liquidnet H2O.

M. Blocking interaction with LPs

Members and customers only interact with IOC orders from LPs when they affirmatively create a Liquidnet algo or LN auto-ex order. Liquidnet maintains a current list of LPs and provides it to Members and customers upon request.

Members and customers elect through Liquidnet Transparency Controls whether to interact with resting and IOC orders from LPs. A Member or customer that elects to interact with resting or IOC orders from LPs can elect to block interaction with certain LPs, as described in the trading rules.

8. Price and other restrictions

Price restrictions

In accordance with Regulation NMS, for US equities, the Liquidnet ATSs are reasonably designed to prevent executions outside the highest displayed bid and lowest displayed ask in the market at the time of execution. In accordance with guidance provided by the SEC, on negotiated trades of 10,000 shares or more, the Liquidnet Negotiation ATS will execute the trade if it is within the best bid and ask at any time during the shorter of the following two periods: the period between the submission of a bid or offer in a negotiation and the subsequent acceptance of the bid or offer by the contra; or the 20-second period preceding a negotiated execution.

In compliance with the limit up-limit down rule adopted by the US exchanges and FINRA, Liquidnet (i) rejects bids above the upper price band and offers below the lower price band, and (ii) prevents executions outside the applicable price bands. Liquidnet further prevents trading during any resulting trading pause.

In compliance with the SEC's tick pilot:

- Liquidnet permits tick pilot test group securities to trade only at the mid-point.
- Liquidnet does not accept any indication or order in a tick pilot test security with a limit price that is not a multiple of five cents.

Permitted price and quantity increments

For securities other than tick pilot test securities: whole penny; mid-peg proposals, accepts and orders are permitted if the limit price is a whole-penny increment

For tick pilot test securities: five-cent increment; mid-peg proposals, accepts and orders are permitted if the limit price is a five-cent increment .

The Liquidnet ATSS execute trades in round lots only (multiples of 100 shares).

Shorts sales

In the case of a Member or customer short selling a US security, by submitting an offer during a negotiation, creating a Liquidnet algo, LN auto-ex or automate negotiation order or transmitting an order to the trading desk, the trader confirms to Liquidnet that:

- The custodian or broker identified by the Member or customer through the desktop application or through FIX is a valid locate for all of the shares of the order
- The custodian or broker has the securities in its possession or has located the securities for borrowing
- The securities are in good deliverable form
- The custodian or broker is able to deliver the securities to Liquidnet's clearing firm within three (3) business days.

If there is an intra-day decline of 10% or more in the price of a US security relative to the prior day's closing price, Members who are short-selling may only submit "mid-peg" proposals for that security for the remainder of that trading day and the following trading day. This is to ensure that short sales in these securities are executed above the bid price, as required by SEC rules.

Members and customers cannot effect short sales, and Liquidnet will block short sales, in US stocks notified to Liquidnet by our clearing firm, GS&Co., where our clearing firm has fails to deliver that they have not been able to close out within the time periods required by the SEC.

Locked and crossed markets

Liquidnet 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), Liquidnet can execute the order if at least one side of the trade is participating in a manual negotiation, has created an automate negotiation order or is responding to an H2O block notification.

9. Liquidnet Transparency Controls

Liquidnet makes available to Members and customers a web-based system known as Liquidnet Transparency Controls. Liquidnet Transparency Controls allows Members and customers to easily see details about the liquidity sources with which they interact and the products and services they participate in that utilize their trading information. Members and customers use the tool to make elections relating to those liquidity sources and products and services that are complementary to Liquidnet's core offering.

Liquidnet has completed its implementation of Liquidnet Transparency Controls. This implementation has involved Liquidnet Sales coverage personnel meeting with Head Traders (or other firm representatives, as designated by the Head Trader) representing approximately 80% of Liquidnet's Members and customers to review and update their firms' elections relating to liquidity sources and Liquidnet's use of trading information. Any firm that has not made its elections through Liquidnet Transparency Controls has been automatically opted-out from interacting with non-core liquidity sources and any non-core use of trading information by Liquidnet. Head Traders who have not made their elections through Liquidnet Transparency Controls can contact their Liquidnet Sales coverage to schedule a meeting. Members or customers can contact their Sales coverage for information regarding their current configurations.

If a Member or customer is also a customer of an automated routing broker, Liquidnet applies the Member's or customer's transparency controls elections to its trading activity as a customer of the automated routing broker.

A participant's opt-in to a service through Liquidnet Transparency Controls means that Liquidnet will make the service available to the participant assuming the participant otherwise qualifies for access to the service based on these trading rules. In certain cases, where a participant has opted-in to a specific service through Liquidnet Transparency Controls, Liquidnet can, upon the participant's request, disable the service for specific traders or instrument types. In certain cases, Liquidnet does not report these configurations through the Liquidnet Transparency Controls website, but upon request Liquidnet can provide a participant with a list of any such configurations requested by the participant and implemented by Liquidnet.

10. Additional information

For additional information regarding the procedures governing entry of orders into the ATS, please refer to the Liquidnet trading rules (Annex F-1a) and Liquidnet Order Handling Q & A Document (Annex F-2).

c. The means of access to the alternative trading system

1. Access by Members

Members interact with Liquidnet by transmitting indications to the Liquidnet broker in the Member's region. Indications are non-binding, which means that a further affirmative action must be taken by the trader before an executed trade can occur.

Every Member that provides indications to Liquidnet must have an OMS with which Liquidnet can interface. An OMS is software that a Member uses to manage its order flow.

When a trader logs on to Liquidnet, the Liquidnet integration adapter electronically transmits to Liquidnet orders from the Member's OMS assigned to that trader. After the trader has logged on, the Liquidnet integration adapter periodically queries the Member's OMS and updates Liquidnet with changes from the OMS relating to the trader's orders.

Liquidnet may filter or make ineligible for trading indications of liquidity where the related OMS order has a limit instruction that is outside the market. If the OMS limit price for a buy order is below the best

bid price in the applicable market, or the OMS limit price for a sell order is above the best ask price in the applicable market, it is considered “outside the market.”

The method of integration with a Member, including whether an OMS integration adapter is provided, can vary based on the Member’s OMS and workflow. Members can obtain additional information regarding specific OMS interfaces by contacting Liquidnet Member Services

2. Access by trading desk customers

Liquidnet, Inc. operates an electronic agency-only trading desk for trading US equities. The Liquidnet, Inc. trading desk is based in New York. In handling an order, the US trading desk can create a Liquidnet algo order to access external venues, Liquidnet H2O and the Liquidnet negotiation system. US trading desk personnel also have access to third party algos. A customer can provide the US trading desk with specific instructions for handling an order, including whether to access the Liquidnet ATs. In addition to their other responsibilities, US trading desk personnel can manage the customer relationship responsibility for LCM customers that are private equity and venture capital firms. Trading desk customers include customers that transmit orders to Liquidnet through their OMS.

If a trading desk customer located in a specific region transmits an order for an equity in another region, Liquidnet’s systems record that order as being routed by the Liquidnet entity in the customer’s region to the Liquidnet entity responsible for execution. The entity located in the customer’s region is considered the routing broker; the entity responsible for execution is considered the executing broker. For example, if a customer located in Hong Kong transmits an order for a US equity, Liquidnet’s systems record the order as being routed by Liquidnet Asia Limited (the routing broker) to Liquidnet, Inc. (the executing broker).

3. Access by automated routing customers

As an alternative means of accessing Liquidnet, buy-side institutions that meet the Member admission criteria can transmit orders (including conditional orders) to Liquidnet via an automated order router. These orders are treated the same as algo orders.

4. Access by liquidity partners

Liquidity partners (LPs) do not have access to the Liquidnet desktop application. Accordingly, they are not able to view any Liquidnet indications, nor are they able to participate in any negotiations. LPs can participate in Liquidnet’s H2O execution functionality.

LPs have the ability to transmit IOC and resting orders to Liquidnet H2O.

5. Additional information

For additional information regarding the means of access to the ATS, please refer to the Liquidnet trading rules (Annex F-1a) and Liquidnet Order Handling Q & A Document (Annex F-2). Please also refer to Annexes F-5a through F-5j below under the heading “Implementation.”

d. The procedures governing execution, reporting, clearance and settlement of transactions effected through the alternative trading system

1. Execution

The procedures governing execution of transactions effected through the alternative trading system are described above.

2. Reporting

For US securities, Liquidnet reports all Liquidnet orders and executions to OATS and reports all Liquidnet executions to the NASDAQ TRF (the trade reporting facility operated by NASDAQ) in accordance with regulatory requirements. Liquidnet also files monthly order execution reports with FINRA in accordance with Rule 605 of SEC Regulation NMS.

3. Clearance and settlement

Trade date

Trades that are made in Liquidnet pre-market open, during the trading day or after the close of the applicable exchange are given a trade date of the current day.

Settlement date

All trades settle on the third business day following trade date (T+3).

Buy-ins; sell-outs

Liquidnet or its clearing firm reserves the right, in accordance with local market practice and subject to local regulations, to buy-in or sell-out a position not settled by settlement date.

Allocations

By the end of the trading day, Members and customers must electronically send Liquidnet trade allocations for all trades done through Liquidnet that day. Such data may be electronically transmitted to Liquidnet via Omgeo's OASYS™/OASYS GLOBAL™ software or another mutually agreed upon method of transmission. Liquidnet transmits trade information to its clearing broker in most cases at the end of each trading day.

Settlement parties

Settlement of US equities is between Liquidnet's clearing broker, Goldman Sachs & Co. (GS& Co.), and the account(s) designated by the Member or customer, based on the Member's or customer's trade allocations.

When a Member, customer or trader submits an order or executes a trade on behalf of a principal account (which may be the Member or customer itself), it is a certification that the Member or customer is authorized to act on behalf of the principal account for such purpose and that the order or trade is a

permitted investment of the principal account. Any trade executed through Liquidnet shall constitute the legal and valid obligation of the principal account.

Settlement process

All accounts to which executions are allocated must be Delivery Versus Payment (DVP) and Receive Versus Payment (RVP) accounts.

All trades must settle according to an account's standing instructions. All instructions must be maintained as current, and any change(s) to any instruction must be updated in the Member's or customer's Alert™ system or made known to Liquidnet's brokerage operations group as soon as possible, via facsimile transmission or e-mail with return receipt.

Trades settle in the local jurisdiction of the security, as indicated by the Liquidnet instrument type. Members and customers must have a custodian, sub-custodian or prime broker in the local jurisdiction.

Trades settle in the currency of the local jurisdiction. Liquidnet does not offer Members and customers the facilities to execute FX transactions.

Single-ticket clearing

Liquidnet can settle Member and customer trades with a broker designated by a Member or customer, where the broker provides a single-ticket clearing service to the Member or customer. In the single-ticket clearing service, orders are not routed through the systems of the single-ticket clearing firm. Trade information is provided to the back-office of the single-ticket clearing firm in real-time, but trade information is not provided to the trading area of the single-ticket clearing firm. Liquidnet's participation in a single-ticket clearing arrangement is subject to agreement of terms among Liquidnet, the Member or customer, and the designated single-ticket clearing broker.

Step-outs; step-ins

Members and customers can step-out to third-party brokers trades executed through Liquidnet, or step-in to Liquidnet trades executed through third-party brokers, subject to agreement among Liquidnet, the Member or customer, and the third-party broker.

Trade confirmations

GS&Co. sends trade confirmations for trades in US equities in accordance with applicable legal requirements.

4. Additional information

For additional information regarding the procedures governing execution, reporting, clearance and settlement of transactions effected through the ATS, please refer to the Liquidnet trading rules (Annex F-1a) and Liquidnet Order Handling Q & A Document (Annex F-2).

e. Procedures for ensuring subscriber compliance with system guidelines

Liquidity Watch is a group within Liquidnet's Compliance Department that monitors for Member non-compliance with system usage protocols. Liquidity Watch maintains metrics for each Member on their system usage and monitors for patterns of conduct by Members, customers and LPs that could cause frustration for other system users. RMs and Liquidnet trading desk personnel have access to these metrics. Liquidity Watch also documents and researches Member and customer complaints and recommends appropriate follow-up. Liquidity Watch also monitors for activity by LPs that is adverse to Liquidnet's Members and customers. Liquidity Watch is a fundamental component of Liquidnet's efforts to provide a protected environment for Members and customers.

Please refer to Section 12.10 of the trading rules for more detail. Please also refer to Liquidnet's Liquidity Watch Handbook (see Annex F-16).

f. A copy of the alternative trading system's subscriber manual and any other materials provided to subscribers

Annexes not marked with an asterisk have previously been filed and have not changed since the prior filing date.

Trading Rules

Annex F-1a - Liquidnet Trading Rules*

Annex F-1b – Liquidnet Trading Rules (marked to show changes)*

Annex F-1c – Notice of Trading Rules update sent to Members and customers*

Order Handling Q & A Document

Annex F-2 - Order Handling Q & A Document

Liquidnet Form Subscriber Agreement

Annex F-3a - Liquidnet Form Subscriber Agreement

Annex F-3b - Liquidnet Form Trading Desk Customer Agreement*

Welcome Letters

Annex F-4a - Welcome Letter for Members and Customers

Annex F-4b - Welcome Letter for LCM Trading Desk Customers

Implementation

Annex F-5a - Implementation Overview

Annex F-5b - Liquidnet – A Technical Perspective

Annex F-5c - Liquidnet Onboarding Questionnaire

Annex F-5d - Liquidnet Implementation Project Plan – Standard OMS

Annex F-5e - Liquidnet Implementation Project Plan – Custom OMS

Annex F-5f - Liquidnet Implementation Project Plan – New Trading Desk

Annex F-5g - Running Liquidnet Offsite

Annex F-5h - Configuring Liquidnet with a Proxy Server

Annex F-5i - Sample Member Packet
Annex F-5j - Remote Upgrade Procedure

Trade Support

Annex F-6a - Liquidnet Standard Settlement Instructions
Annex F-6b - Liquidnet Trading Hours
Annex F-6c - Web Allocation App User Guide
Annex F-6d - Introducing Web Allocations

Market Data Exhibits

Annex F-7 - Market Data Fee Notices for US Equities

Information Security

Annex F-8a - Liquidnet Information Security
Annex F-8b - Independent Service Auditor's Report on Controls Relevant to Security, Availability, and Confidentiality – Integrated Type 2 Report Prepared in Accordance with the AICPA SSAE No. 16 and IAASB ISAE 3402 Standards

Business Continuity and Disaster Recovery

Annex F-9a - Liquidnet BCP Summary
Annex F-9b - Disaster Recovery Procedures

Installation Guides and Release Notes

Annex F-10a – Liquidnet 5 – Quick Reference Guide
Annex F-10b – Liquidnet 5 – Fact Sheet
Annex F-10c – Liquidnet 5 – Installation Guide
Annex F-10d – Liquidnet 5 – Ways to Trade a Block
Annex F-10e – Liquidnet 5.4 Release Notes
Annex F-10f – Liquidnet 5.6 Release Notes

Trading

Annex F-11a - Liquidnet – Liquidity. On A Different Scale
Annex F-11b - Liquidnet Member Community Protocol
Annex F-11c - Maximize Liquidnet Liquidity
Annex F-11d - Liquidnet Trading Markets Commencement Dates
Annex F-11e - Liquidnet's Liquidity Partners*

Strategies/Algorithms

Annex F-12a - Liquidnet VWAP
Annex F-12b - Liquidnet Implementation Shortfall

Annex F-12c - Liquidnet Research: Liquidnet Fair Value Model
Annex F-12d - Liquidnet Next Gen Algos
Annex F-12e - Liquidnet Trading Desk & OMS/EMS Strategy Matrix
Annex F-12f - Liquidnet Barracuda
Annex F-12g - Liquidnet Sweep then Post
Annex F-12h - Liquidnet Close
Annex F-12i - Liquidnet Dark
Annex F-12j - LN Algo Trading Strategies – Testing, Monitoring and Risk Management
Annex F-12k - LN TWAP
Annex F-12l - Liquidnet Portfolio
Annex F-12m - Liquidnet Algo Ranking Model
Annex F-12n – Liquidnet Algo Ranking with Real-Time Course Correction

Liquidnet Capital Markets

Annex F-13 - Liquidnet Capital Markets Business Description document

Operations Procedures

Annex F-14a - LN Personnel Access to Trading Information and Associated Controls Operations Procedures
Annex F-14b – Liquidnet Sales Communication Guidelines Operations Procedures
Annex F-14c – Liquidnet Capital Markets Operations Procedures

Sponsored Broker

Annex F-15a - Sponsored Broker – for Members/Clients
Annex F-15b - Sponsored Broker – for Brokers

Liquidity Watch

Annex F-16 - Liquidity Watch Handbook

Liquidnet Membership

Annex F-17 - Makeup of Liquidnet Membership*

Liquidnet Microsites

Annex F-18 - Liquidnet Microsites

Commission Management

Annex F-19a - Liquidnet Commission Aggregator – Member View
Annex F-19b - Liquidnet Commission Aggregator – Broker View
Annex F-19c - Liquidnet Analyzer

Transparency Controls

Annex F-20 - Liquidnet Transparency Controls

Targeted Invitations

Annex F-21 – Targeted Invitations

* Updated Annex is enclosed.

** New Annex is enclosed.

**Exhibit G to Form ATS
Capacity, Security and Contingency Planning**

Alternative trading system name:	Liquidnet H2O ATS
CRD No.:	103987
Filing date:	December 19, 2016
SEC File No.:	8-52461

Procedures for reviewing system capacity, security and contingency planning

System capacity

Liquidnet has a designated system test group that conducts performance, load and capacity tests in a complete and fully-integrated staging environment to investigate the system's performance and capacity characteristics. This staging test environment is intended to mirror the current production infrastructure, using (to the extent practical) the same class of machines, operating systems, connectivity, and configurations. Client activities, including data load and other sundry testing traffic, are generated against the staging environment using virtual and physical machines running specially-instrumented versions of Liquidnet software and simulators designed to create system activity which can significantly exceed expected maximum load on the production system. System test analysts carefully capture system resource utilization, latency, and other relevant statistics during the course of these tests. If warranted, they also may observe the system for unusual functional behavior or error conditions during the test. These tests help the business gain insight into the overall stability and capacity of Liquidnet's trading systems.

Performance and load tests are executed regularly on the trading system prior to changes which technology analysts have identified as having a sufficient risk of performance impact. The system test group conducts exploratory performance and load tests to describe effects of those changes to software, business logic, and/or infrastructure. In some cases, the system test group also executes tests to compare the performance of alternative approaches. Test results are distributed to all interested parties and recommendations are given for the targeted release. The system test group or individual technology teams may also perform exploratory performance tests on individual components before they are integrated into the system.

System capacity tests are executed approximately four times per year for the purpose of identifying the knee and peak capacity points of selected critical components of the current trading system. Test scenarios are defined and documented internally and reviewed by senior professionals within technology. After conducting these tests, written capacity test reports are distributed to affected technology leads for review. If the results indicate optimizations are necessary to maintain performance, technology leads schedule the work into future releases or make adjustments to the delivery schedule to address them.

Security procedures

Liquidnet has engaged a third party auditing firm to conduct annual SSAE 16 SOC2 reviews focused on Liquidnet's information security policies, processes and procedures. During the review process, the

external auditor examines the information security controls in use at Liquidnet and provides an opinion as to whether the controls are reasonable for a business of the size and complexity of Liquidnet as well as whether the controls operate as described and are consistently implemented. The most recent report from the auditor is included in this filing as Annex F-8b.

Contingency planning procedures

Liquidnet performs a variety of business continuity plan tests each year. The scenarios tested include loss of the use of the corporate offices as well as loss of the use of one of our two geographically diverse, redundant data centers. For more detail, please see Annex F-9a (Liquidnet BCP Summary) and Annex F-9b (Disaster Recovery Procedures).

**Exhibit H to Form ATS
Clearing Firm Controls**

Alternative trading system name: Liquidnet H2O ATS
CRD No.: 103987
Filing date: December 19, 2016
SEC File No.: 8-52461

Third-party controls to ensure the safety of subscriber funds and securities

Liquidnet's clearing firm, Goldman Sachs & Co. (GS&Co.) holds funds and securities on behalf of Liquidnet's customers. We are attaching as Annex H-1 a memo concerning the controls implemented by GS&Co. to ensure the safety of subscriber funds and securities. This description has been provided to us by GS&Co.

**Exhibit I to Form ATS
Direct Owners**

Alternative trading system name: Liquidnet H2O ATS
CRD No.: 103987
Filing date: December 19, 2016
SEC File No.: 8-52461

Liquidnet, Inc., the operator of the Liquidnet H2O ATS, is a wholly-owned subsidiary of Liquidnet Holdings, Inc.