Virtu ITG Hong Kong Limited

POSIT® ALP Guidelines

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1   Introduction

POSIT is an equities alternative liquidity pool ("ALP") that offers continuous trading, supplemented by certain types of matches as described herein.

The types of financial products that can be traded in POSIT are equity market products.

This document sets out the basis on which Virtu operates POSIT and it contains important information for Virtu Agency Brokerage Clients ("clients") whose orders interact with POSIT ("POSIT users") to explain the operating guidelines of POSIT.

This document will be updated when there are changes to the manner in which POSIT handles orders. Clients may find the most recent copy of these guidelines published publicly on Virtu's Disclosures website at https://www.virtu.com/regulatory-disclosures/.

Clients who are enabled for POSIT and place an order with Virtu will be deemed to have accepted these guidelines and requirements set out herein.

Virtu ITG Hong Kong Limited ("VIHK", "Virtu" or the "Firm") holds a Type 1 and Type 7 license from the Securities and Futures Commission ("SFC") (license number AHD810). It is a participant of the Stock Exchange of Hong Kong ("HKEx"). POSIT Hong Kong is operated by VIHK under its Type 7 license, as an Alternative Liquidity Pool ("ALP").

This information will be updated in accordance with section 11 of Schedule 8 to the SFC's Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission (the "Code") from time to time.

1.1   Who may access POSIT?

Only clients of Virtu may have their orders submitted into POSIT. All clients must meet the Client Regulatory Classification. Clients can be categorized into the following broad groups of users ("users"):

- Institutions (such as but not limited to investment companies, fund managers, asset managers, hedge funds, dealers)
- Broker dealers, including Virtu's Brokerage entities
- Liquidity providers

A client enabled to have their orders source liquidity from POSIT has the choice of determining whether it wants its orders to interact in POSIT with some or all of these types of users. Virtu will not disclose the identities of the restricted counterparties and/or other confidential client information to either party.

To have their orders access POSIT, a client must:

- Meet the Client Regulatory Classification
- Meet Virtu's Know-Your-Client and risk profile requirements;
- Enter into a written agreement with Virtu in respect of the brokerage services provided by Virtu and the type of trading undertaken by the entity with Virtu; and
- Be approved as a client of Virtu by Virtu's internal client approval

By way of clarification, a reference in these guidelines to a "client" includes a reference to a "user" of POSIT.

1.1.1   Client Regulatory Classification

To have their orders access POSIT, a client must be a qualified investor within the definition set out in Paragraph 19.2(f) of the Code. This includes the ultimate end client who is responsible for originating the instruction in relation to an order that seeks liquidity in POSIT.

POSIT users must represent and warrant to Virtu, and will be deemed to do so each time they place an order within POSIT, that not only do they constitute a qualified investor for these purposes, but also any underlying client of theirs on whose behalf the POSIT user places an order within POSIT, is also a qualified investor.

1.2   Opting out of POSIT

Access to POSIT is available for all of Virtu's clients. Clients may opt out of POSIT at any time and for no charge by contacting their Account Executive or emailing Virtu's APAC Compliance team (ap-compliance@virtu.com).

1.3   Virtu Proprietary Orders in POSIT

At this stage, VIHK does not place orders for its own account into POSIT.

VIHK's foreign broker-dealer affiliates may route orders to VIHK for execution in POSIT on behalf of such affiliate's underlying clients. Orders from Virtu group entities are not given any form of preferential matching over orders from clients.

2 Access to POSIT and Order Routing

A client may choose how it wishes to access POSIT. The client may;

1. Send orders to Virtu's Trading Desk for placement of the order into POSIT by a Virtu trader;
2. Submit orders to Virtu Algorithms/Routers via electronic connection, which requires a FIX connection to Virtu's order handling

system; or

1. Submit orders to POSIT via Virtu's FIX-In Gateway/Router.
2. Submit orders to POSIT following potential liquidity identification in POSIT Alert ('**Alert**').

Orders sent into POSIT are routed in the manner set out below:
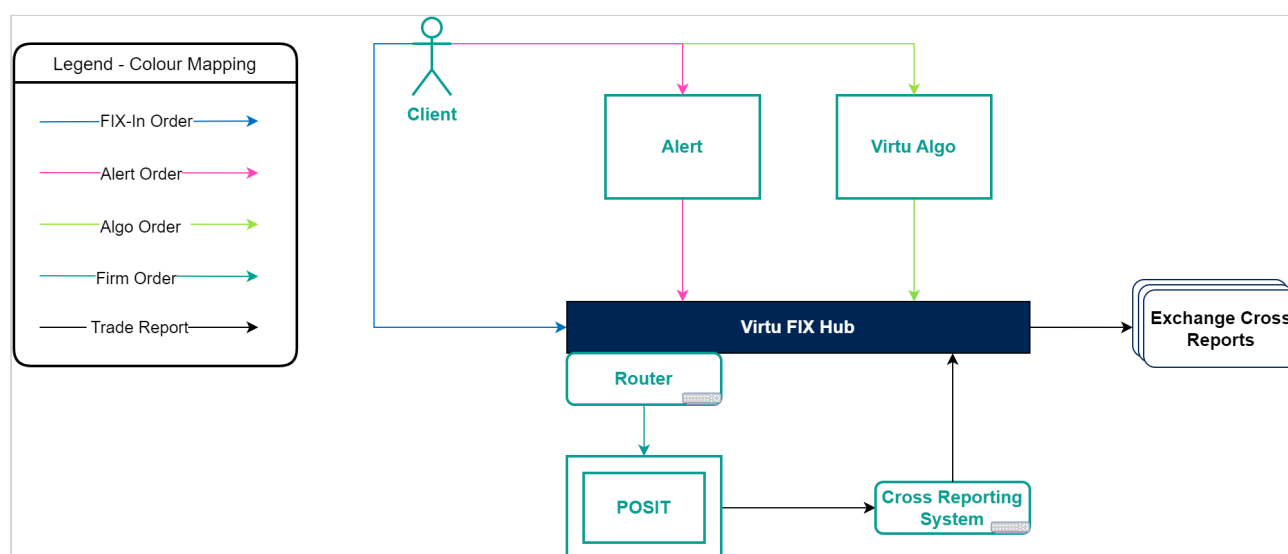
2.1 Accessing POSIT via Virtu Algorithms

If a client wishes to be enabled for their orders submitted to Virtu Agency Execution Algorithms to access liquidity in POSIT, the client will need to comply with the algorithm FIX specification provided by Virtu to the client.

Virtu Agency Execution Algorithms govern a client's interaction with POSIT, therefore, there are no further prescriptive requirements or rules for clients who use POSIT other than those identified in this document (e.g. order types).

2.2 Accessing POSIT via Virtu's FIX-In Gateway/Router.

To access POSIT directly via Virtu's FIX-In Gateway/Router, a client must first be approved to do so by Virtu.

Subject to such approval, Virtu will provide the client with the necessary FIX specification for POSIT.

2.3 Order Routing to Third-Party Operated Dark Pools

POSIT itself does not send orders to third-party Dark Pools (i.e. ALPs and Crossing Systems). If a Virtu client wishes to access a third-party Dark Pool through Virtu, then its order may do so through Virtu's Agency Execution Algorithms.

The current list of liquidity sources Virtu has access to is publicly available on the Virtu corporate website in the Regulatory Disclosures Section. This information is published by Virtu on a best efforts basis only. Users are expected to verify for themselves in case any of the third-party information has been amended and/or updated.

2.4 Submitting Orders to POSIT via potential liquidity identification in Alert

Alert is Virtu's global block indications network. It is a tool designed to identify potential liquidity and notify users of the potential opportunity.

Where a user receives an indication from Alert that there may be potential liquidity available in a desired instrument, and the user elects to act on that opportunity by submitting an order to Virtu, the following information will pass between Alert and Virtu's brokerage:

1. Alert informs Virtu of anticipated order counts for buy and sell orders to be crossed, as well as any changes in those.order counts.
2. Alert informs Virtu of a time before which all Alert users may elect to submit orders, i.e. choose to interact with the indicated liquidity and send an order to Virtu.
3. Virtu will then inform Alert of all information associated with the orders submitted following an Alert election, including the outcome of a match.
4. Virtu also communicates to Alert static client information prior to the start of trading, including configurations that may restrict crossing outcomes, or instances where a match may not be consummated, for example, based upon a default minimum share constraint.
5. Virtu will inform Alert of operational status information.

See further section 4.1 'Orders submitted to POSIT following an Alert Election' below for further details on how Alert users may utilise POSIT.

3 User Obligations and Risks

3.1 Potential Risks of Submitting Orders to POSIT

POSIT users acknowledge and agree that they are aware of potential risks when submitting orders to POSIT. Examples of such risks include, but are not limited to:

- lack of availability of the system due to a technical issue (see further section 5.8 'Suspension of POSIT' and section 5.9 'System failures and outages' below).;
- partial completion of an order or an incomplete order;
- missing liquidity available in other trading venues;
- the potential for adverse selection; and
- mis-priced execution.

3.2 POSIT User Obligations

By being granted access to POSIT, all POSIT users hereby agree to place orders into POSIT in a manner that is not detrimental to other POSIT users or the POSIT system itself.

Each time a client places an order with Virtu for a transaction in POSIT, it agrees that:

- It will send orders to POSIT in accordance with the FIX specifications;
- For self-match orders, the orders placed into POSIT effect a change in beneficial ownership.
- If an order is a short sell order (as deemed so by the relevant rules and regulations of Stock Exchange of Hong Kong ("HKEx"),
- then it will notify Virtu of this prior to or at the time that it placed the order;
- The order complies in all respects with all applicable Rules of the Stock Exchange of Hong Kong ("HKEx"), the relevant provisions of the SFO;
- not only does the POSIT user constitute a qualified investor for these purposes, but also any underlying client of theirs, on whose behalf the POSIT user places an order within POSIT, is also a qualified investor.

4 Order Types

A POSIT user can place the following types of orders into POSIT:

Order Types	Peg
Peg Types	Aggressive, Mid, Passive
Time In Force	Day and IOC
Pricing	Limit and Market

POSIT does not accept any other types of orders and all POSIT users are able to place any of these types of orders in POSIT.

Orders submitted to POSIT must be designated with a time in force: "Day" or Immediate-or-Cancel ("IOC"). Day Orders (also known as "resting orders") may be submitted to POSIT prior to the market open and at any time during the regular trading day and are held in the system's order book until they are matched, cancelled, or expire. Users may submit Day Orders and IOC Orders that include various forms of trading constraints such as expiration of time or limit prices.

All orders in POSIT contain peg instructions, designated as "Passive," "Midpoint," or "Aggressive." Each order submitted to POSIT without an explicit peg instruction is assigned a default peg instruction. These default instructions are set at the user's request or by Virtu. Unless the user otherwise specifies a peg instruction on a given order, the default peg instruction is Aggressive.

Users can include a minimum execution quantity ("MEQ") constraint on their orders. These can be configured as a parameter on individual orders. Where MEQ is applied, POSIT will not execute the order in an amount less than such minimum quantity. POSIT does not aggregate multiple contra side orders to satisfy a MEQ instruction on a single order. POSIT will cancel back an order if the residual quantity of an order falls below the MEQ instruction.

Note: POSIT does not aggregate the orders of different users of POSIT with each other.

Orders must be in round or mixed lots. Odd-lot orders are cancelled back to users. If a mixed-lot order is sent to POSIT, only round lot portions of that order will be eligible for trading, and the odd lot residual is cancelled.

When an order is submitted to POSIT, the system scans for available liquidity to determine whether there is a contra-side Day Order residing in the system. If there is no contra-side Day Order in POSIT, a Day Order will rest in the system and an IOC Order will be cancelled and returned. Unexecuted Day Orders are cancelled in accordance with the instructions of the submitting Users, or by default at the close of regular trading in the market.

4.1 Orders submitted to POSIT following an Alert Election

Where Virtu's brokerage chooses POSIT to cross orders resulting from Alert elections:

- An order will be submitted to POSIT and will be identifiable to the system as having resulted from an Alert election.
- Orders within POSIT that result from Alert elections will only be able to cross against other orders that originated from Alert elections. They cannot interact with other matchable liquidity that may be resting in POSIT.
- Alert users shall be able to seek to submit lunch-time orders in response to indicated liquidity in relevant market securities (even when the relevant exchange is closed for trading during lunch-time), with such prices being the mid-price if valid Bid/Ask quotes are available.
- Upon request from a client, Virtu will apply a maximum notional value constraint to the order.
- Upon request from a client, Virtu will aggregate all of a user's orders that originated from Alert elections. Where such orders have a common minimum execution quantity constraint, Virtu will instruct POSIT to apply the minimum execution quantity constraint on the aggregated order.
- Once Virtu informs POSIT of expected Alert user order count and maximum time period before which Alert users may submit orders, POSIT starts a cross timer. POSIT will attempt to run a cross between orders originating from Alert elections once the expected count of orders has been received.
- POSIT returns all open shares submitted by Virtu for such a cross at the earlier of completion of a successful cross or upon the lapse of the cross timer.
- Alert user orders routed by Virtu to POSIT in response to an Alert indication may only execute in a cross and may be cancelled or corrected before the cross occurs.
- Following a cross between orders originating from Alert elections, any remaining quantity that has not crossed is cancelled back to the Alert users.
- In the event a cross is not possible due to a marketability constraint, POSIT will retry crossing with every quote change while the cross timer runs and there is one or more non-marketable orders originating from Alert elections. If all orders originating from Alert elections are marketable and a cross still cannot be consummated due to other constraints, POSIT will return all orders until the cross timer expires.

- POSIT will return unmatched shares for orders originating from Alert elections once a cross is consummated, or upon the lapse of the cross timer.

4.2 Self-Matched Orders

By default, POSIT does not allow a user's opposing orders to interact with each other in POSIT (also referred to as Self Trade Prevention ("**STP**")), i.e. STP is enabled for all users by default. Where STP is enabled for the client profile, orders submitted to POSIT and originating from the same Virtu client (i.e. with the same client identifier/short-name) are not eligible for matching. They are eligible for matching against opposing orders submitted for other clients, provided all matching criteria is met. This is a process Virtu has put in place which has been designed to prevent orders being effected where no change in beneficial ownership is taking place which could create a false or misleading appearance of active trading in financial instruments within POSIT.

Many of Virtu's clients and users of POSIT, however, have underlying clients of their own ("**Underlying Clients**"), and some of Virtu's clients wish to effect transactions within POSIT where they have both a buyer and a seller as Underling Clients. In such instances, a change of beneficial ownership ("**COBO**") will be effective when the transaction completes (from Underlying Client 'A' as seller, to Underlying Client 'B' as buyer) even though both the buy side and sell side of the order are being effected in POSIT via one party, which is Virtu's client, acting, for example, as Broker, on behalf of both of its Underlying Clients.

For such scenarios, Virtu supports 'Self-Matched Orders' in POSIT, as an **opt-in** feature for users. In order to have the Self-Matched Orders feature enabled, a user must:

- Opt-in for the feature;
- Provide Virtu with a Confirmation of Change of Beneficial Ownership Letter which contains attestations affirming that each order submitted as a Self-Matched Order will represent a change in beneficial ownership and that user is aware of its legal and regulatory obligations in this regard;
- Receive approval from Virtu for user's account to be enabled for Self-Matched Order feature.

There are two distinct ways to utilize the Self-Matched Order feature within POSIT, namely the 'Broker Priority' and 'POSIT-SELF' methods:

1. Broker priority: POSIT employs a price, size, time priority crossing methodology (Please refer to section 5.2 on crossing methodology). A client with the Self-Matched Orders feature approved and enabled on their session is given priority in the queue over size and time to facilitate self-crossing of orders originating from different underlying clients for the same broker. For broker priority to work, Virtu assigned short-name must be the same on opposing sides of the order.
2. POSIT_SELF: Using FIX tag value, POSIT provides a separate facility for users to self-match. A client with Self-Matched Orders feature approved and enabled on their session, can choose to send their orders tagged as POSIT_SELF to ensure cross is only against their opposing orders. For POSIT_SELF to work, a designated FIX tags is required and same Virtu assigned short-name on opposing sides of the order.

Please note: The POSIT_Self method will only ever result in a self-matched order or an order rejection or cancellation. The Broker Priority method is a prioritisation tool - it is possible that part or all of either/both sides of the order could match with other liquidity within POSIT.

5 Trading and Operational Matters

5.1 POSIT Matching

POSIT is an alternative liquidity pool, matching orders on a continuous basis during standard Exchange hours for orders submitted to POSIT by Virtu through a variety of means, both direct and indirect, as described in prior sections. Client orders submitted by Virtu to POSIT participate in continuous matches for as long as the Client's order is in force or until it is fully executed according to its terms.

POSIT is premised on matching buyers and sellers with marketable orders at all permissible price points at or within the Best Bid or Offer on HKEx, including midpoint of the corresponding market.

5.2 Order Handling in POSIT and Execution Methodology

POSIT employs a price, size, time priority crossing methodology. If there are several orders resting at the same price level, larger sized orders go to the top of the queue. Where orders at a given price level are of the same size, orders are then prioritised by time.

- POSIT will execute Peg and Day orders against eligible contra-side IOC, Day and Peg For Peg and Day orders, priority is determined on a price, size, time basis.
- For orders without a peg instruction, the limit price submitted is used to determine the price portion of the queue For orders with a peg instruction, the less aggressive price between the current peg price and limit price submitted is used to determine the price portion of the queue priority.
- A client with Broker Priority approved and enabled on their session will get priority in the queue over size and time to facilitate self-crossing of orders originating from different underlying clients.
- If a user modifies the terms of a previously transmitted order, the order will receive a new order time for matching purposes (i.e. the order will lose queue spot).
    - The only exception to this is a reduction in order quantity which, absent any other changes to the terms of the order, will not update the order time for matching purposes.
- Liquidity providers receive potential price improvement and takers pay the spread adhering to limit and peg
- In the case of an IOC order, the IOC order is always the removing In the case of two Peg and/or Day orders, the first in time is the providing order.

This logic is subject to the following constraints:

- Minimum Execution Quantity;
- User type, ie. one user type (e.g. Institution) wishing to avoid crossing with another user type (e.g. a Broker);
- Limit price (this may make the order unmarketable at the time of the cross);
- Peg instructions (discussed further below); and
- Self Match Prevention (if client not been approved and enabled for Broker Priority).

A client whose orders interact with POSIT has the choice of determining whether it wants its orders to interact with some or all of the different types of clients that send orders to POSIT. If a client wishes to restrict the types of counterparties they interact with in POSIT, they can do so by contacting their Account Executive.

There is a different process for orders originating from Alert elections and for Self-Matched Orders. Please refer to section 4.1 'Orders submitted to POSIT following an Alert Election' and/or 4.2 'Self-Matched Orders' above for further information.

5.3 Pricing of Orders in POSIT

The price of an order matched in POSIT depends upon the limit prices and the pegging instructions on the orders in the match

POSIT can trade at all permissible price points at or within the within the Best Bid or Offer on HKEx, including midpoint, made available by Virtu's Direct Market Data feeds.

Tick Sizes in POSIT follow the tick size regime of HKEx. If the limit sent to POSIT is not tick compatible, then POSIT will round off the limit to the closest compatible tick, adhering to the limit. POSIT will not reject any orders if they are not compatible to tick size.

5.4 POSIT operation hours

For lunchtime crossings (Alert Participants only), please refer to section 2.4 'Submit Orders to POSIT via potential liquidity identification in Alert' section of this document.

After Market Close on each trading day, all orders in POSIT are removed and no orders remain in POSIT to trade on the next trading day.

POSIT operates during the continuous trading sessions on the days upon which HKEx is open in respect of securities which have a valid quote on the Exchange (ie. POSIT will not operate in respect of securities that are in a trading halt). If HKEx is closed for a day, the relevant instance of POSIT will not operate for that day.

5.5 Order cancellation

Order cancellations and amendments are made by the user by sending a standard FIX cancellation or cancel/replace request to Virtu.

5.6 Visibility into POSIT

Certain information related to live orders, trading interest and recent executions that Virtu reasonably believes may suggest a user continues to have the same or additional live orders and trading interests in POSIT, is considered by Virtu to be confidential information. Virtu's policies and procedures restrict access to this confidential information except to certain staff that provide services to POSIT and therefore require access to that confidential information.

Set out below is a non-exhaustive list of the employees that have access to the contents of the POSIT order matching pool, the relevant order and trading information inside that pool, and employees that have access to post trade information.

Title/Team	Department	Reason for Access
Head of Region	Administration	Run reports in respect of POSIT activity
Product Manager APAC		
Middle and Back Officer		
Application Support	Core Ops	First Level support to clients
Development	Development	Second Level support to clients
Alert Support	Core Ops	Support for Alert clients whose orders have been sent to POSIT
Database Administrator	Technology	First and second level support for POSIT databases
Operations	Operations	Bookings and settlement of POSIT orders (post trade information only)
Trading Analyst	Middle and Back Office	Reporting and analytics (post trade information only)
Sales and Coverage	Virtu Execution services	Algorithmic trading coverage (post trade information only)
Compliance	Compliance	Monitoring, regulatory compliance and risk management
Legal	Legal	Legal and regulatory assessment

5.7 Reporting of orders matched in POSIT

Orders matched in POSIT are trade reported to HKEx within the time frame specified by the relevant rules.

5.8 Suspension of POSIT

Virtu will suspend the operation of POSIT if there is a technical or other system issue in respect of POSIT that materially affects the efficient or proper functioning of POSIT. Ln such instances, the matching engine of POSIT will be suspended and POSIT may reject any new orders sent into the system and cancel any existing open order in POSIT at the time.

5.9 System failures and outages

If there is a technical or other system issue in respect of POSIT that causes a material delay or failure to the operation of POSIT, the Virtu POSIT Support Team will notify Virtu's APAC Compliance Team and inform it of the issue.

Where required, the Virtu APAC Compliance Team will then notify the relevant regulator and/or exchange, of the following:

- A description of the effect or the technical and/or other system issue;
- The causes or possible causes of the material delay or failure to the operation of POSIT affecting clients with orders in POSIT; and
- How the issue is being managed by

Virtu will also notify all clients that have orders in POSIT at the time of the issue of the above and keep them updated if necessary.

Once the issue is resolved, the Compliance Team will update any previously notified regulators of the resolution and Virtu will notify all clients that have orders in POSIT at the time of the issue of the same.

During such an issue, Virtu is able to suspend symbols in POSIT which results in no matches taking place in POSIT. Virtu can also cancel open orders in POSIT and reject new orders from being submitted into POSIT.

In addition, clients should be able to cancel out their orders from POSIT depending upon the nature of the issue. If this is not possible, the client can contact its Account Executive or the Virtu Trading Desk and instruct them to cancel its orders on its behalf.

In the event of the suspension of POSIT, Virtu will not re-route new or existing orders in POSIT to alternative execution venues.

5.10 Conflicts of Interest in POSIT

At this stage, VIHK does not place orders for its own account into POSIT.

VIHK's foreign broker-dealer affiliates may route orders to VIHK for execution in POSIT on behalf of such affiliate's underlying clients. Orders from Virtu group entities are not given any form of preferential matching over orders from clients.

POSIT does not give any form of preferential matching based on agreed commission rate.

Although it does not engage in proprietary trading within POSIT and it therefore does not experience conflicts of interest normally associated with such activity, when VIHK executes or arranges any transaction for a client via POSIT, VIHK (or an affiliated company) may have an interest, relationship, arrangement, or duty which gives or may give rise to a conflict of interest with client's interest(s) in relation to the investment or transaction concerned or investments or assets underlying, derived from or otherwise directly or indirectly related to such investments ("Material Interest").

Subject to Applicable Law and VIHK's obligation to disclose to client here, client agrees that VIHK (or an affiliated company) is entitled to provide services to, or effect transactions for, client, notwithstanding that VIHK may have a Material Interest in, or a potential conflict of interest in relation to, the transaction or investment concerned, and Customer consents to VIHK's acting in any manner which VIHK would consider appropriate in such cases.

Should any conflict of interest arise from any source, VIHK will endeavor to achieve fair treatment for client in relation to any such transactions and will manage any conflict of interest in accordance with Virtu's Code of Conduct.

6 Fees

Orders placed into POSIT that are matched are charged a brokerage commission fee that is predetermined through negotiations and is standard to the client. These fees are not in addition to Virtu's standard commission rates.

Virtu does not implement a fee structure whereby fees are determinate by user type. Rather, POSIT fees are negotiated on a client-by-client basis. There is no preference or effect on an order's interaction with POSIT which is in any way linked to client fees.

7 Fair Treatment of POSIT Users

POSIT is operated by a common set of procedures for all users with the exception that Self-Matched Orders and orders originating from Alert elections are segregated from other liquidity in POSIT for matching purposes.

Virtu monitors, and from time to time analyzes, the interaction in POSIT to monitor consistent treatment of client orders across various aspects.

For the avoidance of doubt, this extends to POSIT orders received from clients that are related bodies corporate to Virtu and to orders from third-party brokers and/or liquidity providers.

8 Legal Information

8.1 Audience

The intended audience for this document is all clients of Virtu that access POSIT.

8.2 Note to Clients

Virtu may modify these guidelines at any time and at its own discretion. Upon material modifications, Virtu will notify its clients of the changes to the guidelines. By placing an order with Virtu for POSIT, clients will be deemed to have accepted these guidelines in their current form at the date of the placement of the order.

Nothing in these guidelines should be taken as legal advice or a guide to action. Any failure by Virtu to comply with these guidelines does not constitute a breach of Virtu's Terms of Business with a client.

CONTACT

To learn more, contact your sales representative or call our desk at:

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