



GTS Securities, LLC

Wholesale Market Making

GTS Securities, LLC (“GTS” or the “Firm”) Wholesale Market Making (“WMM”) business unit is a global leader in providing liquidity to markets across financial instruments and throughout the world. GTS is a market maker and execution service provider in all NMS and OTC equity securities. GTS provides liquidity directly to broker-dealer client orders in a principal and riskless principal manner tailored to the requirements of each client order. GTS endeavors to use reasonable efforts to apply the below order handling and execution protocols¹ when processing NMS and OTC equity orders from its clients.

For additional information relating to WMM equity order handling protocols, please contact a GTS representative.

Written Methodology: Order Execution and Priority

Preface: This document details the WMM Desk guidelines for providing order handling and best execution. The methodology provided herein describes WMM execution pricing and timeliness standards as well as the priority applied to the processing of pending orders. The overwhelming majority of orders are processed consistent with this methodology. The framework recognizes that an occasional execution may fall outside of the guidelines due to the complexity of order processing. Transactions brought to the attention of GTS which are executed outside of the guidelines may be eligible for a price/size adjustment at the sole discretion of GTS.

Order Management System (“OMS”) Processing: The Firm’s OMS applies automation to the handling of client orders and order execution when practicable and within relevant risk considerations. The Firm has designed its OMS to provide execution pricing and promptness in a manner which is as favorable as possible under prevailing market conditions. The objective of the OMS design is to provide an execution methodology that is fair. The Firm also intends to consistently provide execution priority based each order’s time of receipt, price, and size relative to other orders in the order queue. The OMS coding is intended to comply with FINRA Rules 5310 and 5320 and interpretive guidance thereunder.

Auto-ex and Price-Improvement Offering: WMM provides discretionary auto-ex and/or price improvement to eligible orders. Eligibility for auto-ex is in the sole discretion of GTS for any client,

¹ **Disclaimer:** These protocols are subject to modification, suspension, or cancellation at the sole discretion of GTS and may occur without prior notification to clients. Modification, suspension, or cancellation of these protocols may occur on a stock, client, or firm basis or otherwise.



and for any security. GTS may suspend, modify, and/or apply auto-ex and/or price-improvement eligibility without prior notice to its clients. GTS auto-ex and/or price improvement are provided for by OMS design. GTS does not have a duty nor does the client have a reasonable expectation that an auto-ex and/or price improvement is required. Furthermore, a manually executed trade may provide price improvement at the sole discretion of the trader handling the execution which determination does not give rise or duty to provide price improvement to any other order with same, similar or different terms or conditions. When executing the queue, marketable limit and market order are sequenced using time priority (all other terms being equal).

Auto Order Crossing and Queue Priority: For NMS securities, the OMS design provides auto-crossing of market and marketable limit orders only at the time of order receipt consistent with FINRA Rule 5320.07. OMS system crossing logic does not auto-cross two orders that are resting on the book (after initial receipt) and this function is not applied to not-held orders. For both NMS and OTC securities, when orders are resting on both sides of the book, the Firm makes every effort to auto-ex or manually execute the resting orders when eligible. Orders in the queue that are eligible for protection under FINRA Rule 5320 trading ahead requirements are provided executions based on price and then time priority (all other terms being equal). Marketable orders that are routed² for execution (such as for an execution at the opening price or otherwise) may not receive order protection for principal trades that occur in the time window after the route and before completion of the execution.

Manual Processing: Manual order handling complements OMS programming and is necessary in numerous scenarios including, but not limited to key factors such as, fast moving markets, market open/close, not-held orders, large (including block) sized orders, special handling instructions, and locked/crossed markets. Manual execution price, promptness, and priority take into consideration order terms and the key factors listed above. Furthermore, preventive risk controls also use the key factors listed above and such risk controls may trigger the need for manual handling. Promptness of order execution or priority sequencing can be affected during the manual handling scenarios.

GTS will seek to provide the client with Best Execution, however, accessing marketplace liquidity for securities with limited or no quotes (such as no bids and/or no offers) provides unique challenges. As such, GTS may need to unilaterally cancel orders in securities with limited or no quotes depending on marketplace conditions. Also, securities with limited or no quotes will reflect greater price volatility and may lead to slower execution times and/or no execution/cancellation of the order. For example, an order to sell a security which has no bid or

² GTS WMM trades in a principal or riskless principal capacity. Any reference to the “routing” of orders in this document refers to the process of GTS sending representative principal orders on behalf of the client order. The OTC market has structural differences from the NMS market and client orders are represented through the GTS WMM principal quote size and/or price rather than through linked order routing.



no available buying interest may lead to delayed order handling including volatile pricing, no execution and/or cancelation of the order.

Held/Not-Held: GTS OMS provides held orders with priority over not-held orders for the OMS order protection trade ahead logic. A child order(s) may be created in connection with a parent not-held order. A child order with the auto-fill feature enabled will cause the OMS to process it as a held order using its creation time for priority sequencing. A trader may manually execute a not-held order using factors relevant to best execution while exercising reasonable judgment regarding priority relative to other pending orders.

Accommodation: The OMS is reasonably designed to achieve the execution price, promptness, and priority. Price, promptness and/or sequencing results which are not within the stated methodology are not an indication that GTS failed to consistently apply its written methodology nor is it indicative that GTS failed to follow its policies/procedures. GTS at its sole discretion may provide an accommodation (price and/or size modification) to an order.

Held Orders

Held orders will be handled within best execution guidelines. Generally, Market, Marketable Limit and Limit orders will be executed or routed timely to obtain the best available price. Markets are dynamic and a variety of factors are considered when assessing best execution including:

- Security trading characteristics
- Market volatility
- Impactful news or events
- Locked or crossed markets
- Trading halts
- Market center responsiveness
- Marketplace technology outages or issues
- Risk control thresholds
- Specific client requirements

Not-Held Orders

A net trade is a principal trade in which a broker-dealer, after having received an order to buy (sell) an equity security, purchases (sells) the security at one price and satisfies the original order by selling (buying) the security at a different price. The difference between the price of the initial transaction(s) and the price of the offsetting transaction generally is considered the broker-dealer's compensation. GTS does not charge disclosed commissions when trading net. Mixed capacity executions which are trades that may include liquidity provided on a principal basis as well as shares acquired after receipt of an order are outside the scope of the net trade definition.



GTS may execute not-held orders received from its clients on a net basis. GTS, for example, may use its discretion and accumulate shares in its principal account while handling a not-held order and may execute that order on a net basis. GTS may also use its discretion and commit its capital to execute all or part of a not-held order. GTS may also provide an execution which consists of both accumulated shares and shares from a capital commitment. In the totality of the circumstances and in consideration of the specific characteristics of an order and the market condition for a security, a client order will be executed with fair compensation relative to the brokerage services provided to the client by GTS. Unusual market conditions or a specific agreement with the client may affect the compensation applied to a net trade. If the client prefers that GTS does not execute its not-held order(s) on a net basis, please contact a GTS representative to express such preference. If the client has no objection to GTS executing its orders on a net basis, then no action is necessary on the client's part. Broker dealers who route orders to GTS may also have an obligation to provide a net trading disclosure to their customers.

Net trades are not eligible for an exemption under the NMS Rule 611 Order Protection Rule. The net price that is reported to the appropriate Trade Reporting Facility ("TRF") and disseminated to the public is the price of the trade. If necessary, GTS will route intermarket sweep orders ("ISOs") to execute against protected quotations to comply with the Order Protection Rule. Unless explicitly agreed to prior to execution, any fills from these ISOs will not be passed along to the client, but instead will be for GTS's principal account.

Order Cancellation

Cancel instructions will be processed timely and when appropriate a cancellation confirmation will be given. Unless a cancellation instruction is confirmed by GTS as cancelled, the subject order remains open and active under the terms of the order. Specific circumstances may result in a cancellation request being denied or a cancel confirmation being delayed. Factors determining whether GTS may deny, or delay responding to a cancellation request include:

- Order type (i.e. Not-Held, AON)
- State of the order (i.e. working, routed, process of being filled)
- Market center responsiveness for routed orders
- Marketplace technology outages or issues
- Large (including block) sized orders
- Trade Halt/Pause, Market Wide Circuit Breaker

Pre-Open Orders

For NMS securities, eligible orders received by GTS prior to the cutoff time of the primary listing exchange generally will be routed to the primary listing exchange for inclusion in the opening cross process.



For OTC securities, eligible orders received by GTS prior to 9:28AM ET generally will participate in the GTS proprietary opening cross process.

Crossed Market Executions

The OTC market bid and offer will be crossed from time to time such that the bid is priced higher than the offer. GTS may continue to execute client held orders in a crossed market such that sell orders executed on a principal basis will be priced no lower than the offer and buy orders no higher than the bid. Order protection protocols will be enforced during crossed markets. For example, eligible held orders will be executed on a riskless principal basis for liquidity obtained on a principal basis.

Customer Order Protection

Open market and limit orders residing on the GTS order book will be protected in accordance with FINRA Rule 5320 (“Prohibition Against Trading Ahead of Customer Orders”) order protection rules from 9:30 am to 4:00 pm. Any GTS principal trades which occur while holding an eligible unexecuted order will trigger a simultaneous execution for the quantity of shares eligible for order protection and at the same or better price.

OTC Market Unsolicited Quote Eligibility

Effective September 28, 2021, when OTC Markets classifies a security as Expert Market or not PBQ eligible in the Limited Information Tier, GTS will not quote a client order unless the routing broker-dealer has represented that the order is unsolicited and not from a company insider or affiliate of the issuer. The routing broker-dealer may use the FIX Tag 377 set to “N” and the FIX Tag 9535 set to “Y”. This information may be provided verbally, through a standing representation, or otherwise. Orders placed before this date will need to be resubmitted to GTS with the necessary information to enable GTS to quote client orders. These orders can be canceled by GTS or directly by the client. The client shall advise GTS how it would like to handle any required cancellations. New orders in these securities will be processed and executed on a case-by-case basis. For GTC (as defined below) orders, the client confirms with its customer on a day-by-day basis whether the customer who placed the orders is a company insider or affiliate of the issuer. When the customer’s company insider or affiliate status changes, the Client will immediately cancel the order with GTS.

Trading Halts

GTS does not execute orders during trading halts. During trading halts GTS will generally route orders to the primary listing exchange for participation in the post halt opening cross process. The client may not unilaterally cancel an order during a trading halt when all or part of its order was completed but not confirmed to the client prior to the halt. The trade confirmation for the client’s order would be communicated to the client after the halt is lifted, consistent with marketplace rules.



Post-Trade Processing

For NMS securities, GTS reports all eligible trades to the FINRA/NASDAQ TRF.

For OTC securities, GTS reports all eligible trades to the FINRA Over-the-Counter Reporting Facility ("ORF").

GTS clears its trades through Goldman Sachs.

Corporate Actions

GTS adjusts or cancels client open orders in accordance with FINRA Rule 5330 ("Adjustment of Orders"). Corporate actions adjustments will be applied in the following scenarios:

- **Cash Dividend:** Buy limit and sell-stop orders will be adjusted by subtracting the dividend from the order price then rounding down to the next minimum quote variation.
- **Stock Dividend and Forward Split:** The dollar value of the stock dividend or split is rounded up to the next higher quote variation then subtracted from the order price of buy limit and sell-stop orders. The quantity of the order will then be increased by multiplying the original order quantity by the numerator of the ratio of the stock split. The resulting value is divided by the denominator of the ratio of the stock split which is then rounded to the next lowest share.
- **Reverse Split:** All open orders will be cancelled.
- **Symbol Changes:** All open orders will be cancelled.
- **Stock Delisting:** All open orders will be cancelled.

Do Not Reduce ("DNR") / Do Not Increase ("DNI"): Orders marked DNR will not be adjusted for Cash Dividends. Orders marked DNI will not have their size adjusted on stock dividend or split actions.

Clearly Erroneous

In accordance with FINRA Rule 11890 ("Clearly Erroneous Transactions"), GTS reserves the right to modify or cancel transactions which it deems "clearly erroneous." GTS will generally contact the client to confirm error scenarios prior to taking action.

Business Continuity

In conformance with FINRA Rule 4370 ("Business Continuity Plans and Emergency Contact Information"), GTS has adopted and implemented a Business Continuity Plan ("BCP") addressing the actions the Firm will take in response to a significant disruption to its business. The goal of the BCP is to reestablish the Firm's operations as soon as possible, taking into account the nature of the business disruption.



Normal Market Conditions

GTS protocols apply during normal market conditions. Non-normal market conditions may affect the handling of client orders and impact GTS's automation and order processing practices. GTS reserves the right to process orders during non-normal conditions in a manner consistent with then-existing market conditions and will take reasonable steps to provide best execution within the existing conditions. Examples of non-normal conditions include:

- Locked and Crossed Markets
- Limit up / Limit Down Trading Halts
- Market Wide Circuit Breakers
- Trading Suspension and Halts
- Market activity that is extremely volatile in terms of high volume and/or price movement
- Outages, disruptions, or delays related to market data feeds or Exchange/ATS connectivity or operations
- Regulatory Orders and Restrictions

Order Types

Order terms: Order terms are used to support execution pricing, timeliness, and priority sequencing by the WMM OMS and are also used when an order is processed manually.

All-Or-None ("AON")

AON orders received by GTS generally will be handled through proprietary automation or manually by the trading desk depending on a variety of factors (see Held Orders).

Stop / Stop-Quote

At the discretion of the client, GTS will trigger stop and stop limit orders based on either the last sale of the Consolidated Tape ("Default") or on the National Best Bid / Offer ("NBBO"). The option of Stop versus Stop-Quote instruction can be managed at the client profile level or transmitted by the client on an order-by-order basis.

In certain scenarios, GTS will apply proprietary filters to prevent Stop and Stop-Quote orders from triggering as a protective measure for clients.

Immediate-or-Cancel ("IOC")

IOC orders received by GTS will receive a full execution, partial execution, or cancel. Any remaining balance of the order in a partial execution scenario will also be canceled.

Fill-or-Kill ("FOK")

FOK orders received by GTS will receive a full execution or cancel.



DAY

DAY orders received by GTS will be eligible for execution during regular market hours only. DAY orders with an unexecuted quantity will be considered canceled at the conclusion of regular market hours.

Good-til-Cancel (“GTC”)

GTC orders received by GTS will be eligible for execution during regular market hours only. GTC orders may remain open in the GTS order book for one calendar year at which point any remaining open quantity is subject to unilateral cancellation in GTS’s sole discretion.

Good-til-Date (“GTD”)

GTD orders received by GTS will be eligible for execution during regular market hours only. GTD orders will remain open in the GTS order book until the end of regular market hours on the date specified on the GTD order.

Market-on-Open (“MOO”) / Limit-on-Open (“LOO”)

MOO and LOO orders received by GTS prior to the primary listing exchange opening cross cut-off time will be routed by GTS, using reasonable efforts, to the primary listing exchange opening auction process. Any unexecuted portion of the MOO / LOO orders will be canceled timely back to the client following GTS’s receipt of the message indicating the MOO / LOO orders did not receive full execution from the primary listing exchange. GTS adheres to primary listing exchanges rules for cut-off times for order updates and cancellation requests.

Market-on-Close (“MOC”) / Limit-on-Close (“LOC”)

MOC and LOC orders received by GTS prior to the primary listing exchange closing cross cut-off time will be routed by GTS, using reasonable efforts, to the primary listing exchange closing auction process. Any unexecuted portion of the MOC / LOC orders will be canceled timely back to the client following GTS’s receipt of the message indicating the MOC / LOC orders did not receive full execution from the primary listing exchange. GTS adheres to primary listing exchanges rules for cut-off times for order updates and cancellation requests.

Order Handling Trading Outside Core Market Hours

Unless specifically designated as eligible for trading outside core market hours, an order will not receive order protection for trades that are executed by the Firm in its market making and/or principal accounts outside core market hours. Core market hours are defined as 9:30-4:00 eastern time. As such, the Firm may trade in the pre-open or the post-close periods while in possession of client orders.

Request for Quote



Clients may send GTS a Request For Quote (“RFQ”) seeking an indication of buying or selling interest in a particular security. A GTS RFQ response is indicative interest. GTS may be willing but not obligated to trade at the indication given.

Market Access Risk Controls

All orders received by GTS are subject to pre-trade financial risk, erroneous order, and regulatory risk checks prior to automated execution processing. Orders which trigger a GTS market access risk control may be subject to additional manual review and, in some cases, an order may be delayed in execution or may be rejected. During the period of time that an order is subject to review, automated order handling protocols would not be in force such as order protection, order display, and auto-crossing.

Account and Trading Restrictions

GTS reserves the discretion to unilaterally place limitations and/or restrictions on its client relationships considering, among other things, the client’s proposed business activity and/or a review of the client’s business activities. The Firm with or without prior notice may implement systemic soft/hard blocks enabling GTS to enforce its determination to limit the trading services offered to a client.



NEGATIVE CONSENT AGREEMENT

As provided herein, GTS is a trading center and market maker in non-NMS securities and provides execution services to retail customer facing broker dealers in public companies which OTC Markets Group classify as OTC Pink Limited Information, OTC Pink No-Information, Grey Market, and Caveat Emptor (collectively referred to as “Micro-cap Securities”). Trading in Microcap Securities presents unique regulatory risks which are detailed by FINRA in Regulatory Notices 21-03, 09-05 and 19-18 and the Securities Exchange Commission Staff Bulletin: Risks Associated with Omnibus Accounts Transacting in Low-Priced Securities (November 12, 2020) (collectively referred to as “Regulatory Guidance”).

GTS provides execution services to a select list of broker-dealer clients and reserves the right to reject/block orders in Micro-cap Securities from non-authorized broker-dealers. A broker dealer which seeks to send orders to GTS for trading services in Micro-cap Securities must establish, maintain, and enforce the regulatory requirements detailed in the Regulatory Guidance. When you send orders to GTS in Micro-Cap Securities, you affirm that you have the sole responsibility for adopting specific regulatory risk management controls and supervisory procedures related to Micro-cap Securities where, based on your broker-dealer’s relationship to the ultimate customer in the transaction, you are better situated by virtue of your relationship with the ultimate customer and your access to trading and account information, to more effectively implement those specific controls and procedures. In connection this unique relationship with the retail customer, you the broker-dealer represent that before you sent GTS an order in a Micro-cap Security you:

1. Have implemented an effective compliance and AML program as required by applicable rules, regulations, and regulatory guidance, that includes appropriate risk-based procedures for conducting ongoing customer due diligence, including procedures for conducting ongoing monitoring to identify and report suspicious transactions especially as related to trading in Micro-cap Securities.
2. Enforce a system of supervisory controls to identify and address ‘red flags’ as required by applicable rules, regulations, and regulatory guidance, including FINRA Regulatory Notices 21-03, 19-18, and 09-05
3. Have adopted and maintain customer related supervisory controls and systems to mitigate risks associated with Micro-cap Securities as required by applicable rules, regulations, and regulatory guidance, including FINRA Notices 21-03, 19-18 and 09-05.
4. Will not send to GTS, unless otherwise agreed in writing, any orders in Micro-cap Securities originating from the type of customer relationships described in the Securities Exchange Commission Staff Bulletin: Risks Associated with Omnibus Accounts Transacting in Low-Priced Securities (November 12, 2020).