
OMEGA ATS

Subscriber Information Manual

Effective:

December 1, 2008

Revision History

Date	Description	Author
August 21, 2008	Standard boardlots (page 4) to change from 100 shares across all traded securities to 100, 500, and 1,000 shares according to Canadian market convention.	Greg King
August 28, 2008	Subscribers are responsible for ensuring orders marked “Short Exempt” are eligible for such treatment under UMIR. Omega’s previous method of screening Short Exempt orders against the list of short-exempt symbols was overly restrictive, since UMIR permits the use of the Short Exempt market in other situations (<i>i.e.</i> , bundled orders as per MIN 2005-025); removal of such screening will result in more flexibility for subscribers.	Mario Josipovic
October 15, 2008	<p>Subscribers may elect pre-and post-trade attribution although the default remains Anonymous.</p> <p>Omega Subscribers are provided trade-through and book-through protection as default values. Such orders are by default re-priced to eliminate those outcomes. Subscriber may elect non-default values to either bypass protection altogether or may choose to have orders Reject instead of re-price.</p>	Greg King

Introduction

OMEGA ATS provides the Canadian marketplace with a fast, anonymous, strict price/time priority trading platform where customers will be able to trade at or better than the CBBO (Canadian Best Bid and Offer) at competitive rates. OMEGA ATS will initially support TSX-listed securities. The purpose of this document is to explain trading and settlement on Omega ATS, how to become a subscriber and how vendors and subscribers can connect. To download the latest version of this document, please check our website at www.omegaats.com.

Joining OMEGA ATS

Becoming an Omega ATS Subscriber

Subscribers must be dealers registered in one or more provinces in Canada and members of the Investment Dealers Association of Canada, with a registered clearing number and account at CDS.

To subscribe, the following additional documents must be completed:

- [Omega ATS Subscriber Agreement with RS Release](#)
- [Omega ATS Subscriber Information Form](#)

Subscribers are encouraged to review the full text of this Omega ATS Subscriber Manual, as well as the following:

- [Omega ATS Clearly Erroneous Policy](#)
- [Omega Policy on DMA Access](#)

Becoming an Omega ATS Vendor

Service Bureaus and Data Vendors need to complete the following forms to connect to Omega ATS:

- [Omega ATS Vendor Agreement](#)
- [Omega ATS Vendor Information Form](#)

Connecting to Omega ATS

Subscribers must connect to Omega ATS via VPN, Extranet or service bureau and are responsible for arranging them.

- Extranet providers with connections to Omega ATS include BT Radianz, TNS and Savvis.
- If using a service bureau, have your service bureau contact Omega ATS about establishing a connection.
- Contact points for [Service Bureaus](#)
- Contact points for [Connectivity](#)

Order Entry

FIX.4.2 is the access protocol of the Omega ATS.

Market Data Feed

Full depth of book market data is available.

Omega ATS follows four documented Market Data formats.

- ITCH 3.00
- SoupTCP 3.00
- An optional Market Data compression algorithm (documentation and code)
ZLib 1.2.3

Bandwidth Requirements

- FIX O/E: Recommended 128B/s
- Depth of Book (Compressed): Recommended 1.5MB/s
- Depth of Book (Uncompressed): Recommended 3MB/s

For complete technical specifications: [Omega ATS Interface Specifications](#)

Trading on Omega ATS**Price, Execution, Liquidity**

The Omega ATS business design utilizes a highly competitive Maker/Taker model. Subscribers posting liquidity will receive a rebate while subscribers taking liquidity pay an execution fee. If a subscriber enters an order without post-only instruction, it will be matched against the ATS at the best price. If unable to match, the order will be placed on the ATS book and presented to the market via the ATS data feed. Price improvement, if available, is given to orders that remove liquidity from the book.

Market Regulation

Investment Industry Regulatory Organization of Canada (“IIROC”) provides market surveillance. Omega ATS provides a data feed to RS allowing the status and trading of all equity symbols to be monitored through the RS interface. Regulatory halts (and resumptions) will be enforced solely at RS’s discretion.

Order Marking

Subscribers are able to make all UMIR-required designations on all orders types accepted by Omega ATS. At this time, Omega ATS supports UMIR marking of the order types described at UMIR 6.2(1)(b) (vi) and (viii) through (xvi).

Trading hours

Omega ATS is open for trading between 9:30 AM EST and 4:00 PM EST.

There is currently no matching facility for orders prior to market open and Omega ATS will not otherwise accept orders prior to market open. The very first order received immediately following market open will be accepted and displayed on Omega ATS.

Trading Increments

- Increment of standard board lots:
 - \$1 and up 100 shares
 - \$0.10 and less than \$1 500 shares
 - Under \$0.10 1000 shares

-
- No odd-lots or special terms
 - No sub-penny pricing (except for half-penny increments permitted on orders submitted below \$0.50)

Order Priority Queue

Omega ATS's order book follows price/time priority rules.

“Post Only” Orders

Subscribers can submit Execution Instructions that specify orders are to be “posted” to the book. Orders flagged as “Post Only” are not eligible to remove liquidity from the order book. If an order marked “Post Only” is immediately executable (*i.e.*, it can remove liquidity from the order book), it is instead rejected. A “Post Only” order can never take liquidity.

Order Types

Limit Orders

Limit orders are executed at the price (or better) specified in the order. All orders adding liquidity will be placed on the book at the price in the order. It is possible for an order that removes liquidity to be filled at a better price than specified in the order.

Day Orders

Day orders are effective during normal market hours between 9:30 AM EST and 4:00 PM EST. Orders that are still open at 4:00 PM will receive “done for day” messages informing the originator that the order has been closed.

Fill Or Kill

If the order can not be completely filled immediately, it is cancelled instead of being placed on the book.

Immediate Or Cancel

The ATS matches as many shares as possible and balance is cancelled.

All or None

Omega ATS accepts All-or-None order requests but they will be treated as a Fill or Kill.

Good Till Cancelled

Not currently supported.

Market Orders

The ATS does not currently accept Market Orders.

Short Sale

Short Sale limit order with short sale protection. If the limit is below the last effective sale price, the order will be rejected. (See Order Handling for more information on determining the last effective sale price.)

Short Exempt

Short Sale limit order without any short-sale protection. Subscribers are responsible for ensuring orders marked “Short Exempt” are eligible for such treatment under UMIR.

Order Handling

All orders marked as Short are checked to determine if the security is “shortable” and if it is a “Short-exempt” (i.e a short-exempt interlisted or exchange traded fund security). If the security is not shortable, the order is rejected. If the security is a short-exempt security, the order bypasses the last-sale price rule described below.

Omega will reject a Short Sale order if it is below the *effective last sale price*, determined as follows:

Basic Short Sale Rule

UMIR 3.1 – Restrictions on Short Selling on page 3. There are 4 possible outcomes:

1. the TSX last price is more recent than Omega's last price and it is lower than Omega's last price.
2. the TSX last price is more recent than Omega's last price and it is higher than Omega's last price.
3. the Omega last price is more recent than TSX's last price and it is higher than TSX's last price.
4. the Omega last price is more recent than TSX's last price and it is lower than TSX's last price.

In outcomes 1-3, the TSX price is used as the effective last sale price for Short Sales. Only if Omega's last price is both the most recent of the two marketplaces and the lowest of the two marketplaces is Omega's last price used (outcome 4) for Short Sale.

More simply put, if Omega is the most recent and is the lowest price then use Omega as the *Rule* price, otherwise use the TSX price.

If the order price is less than the *Rule* price it is not allowed to be matched or booked. Otherwise, match the order (if possible) and book remaining shares.

The order is a Limit Order and must be valid to be booked. It is not pegged and will not float with the *Rule* price if the *Rule* price changes as a result of trade-through.

Trade-Through / Book-Through Protection

All orders entered onto Omega ATS are, *by default*, provided with trade-through and book-through protection. If the order is immediately executable but would trade-through a better-priced order on an away-market, the order will be re-priced to the better priced far-side of the away-market and posted on Omega. If an order that is not immediately executable but would book-through a better-priced away-market (i.e. would result in a crossed consolidated market price), the order will re-price to the better priced far-side of the away market. (N.B. The re-pricing feature is not dynamic and will only re-price as necessary at the time of order entry. IIROC does not expect other protected marketplaces to be dynamically monitored once an order has been validly booked. In other words, once a limit order is validly re-priced and booked, it constitutes the legitimate Canadian Best Bid/Offer until executed, price modified or cancelled.)

Subscribers can also elect non-default values:

1. by-pass the trade-through /book-through protection altogether.
2. elect to have orders that would otherwise trade or book-through *Reject* instead of re-pricing.

Non-default values are entered on an order-by-order basis. For details, please see FIX Tags 6820 and 6821 in the Omega Interface Specifications V 1.15.

Subscribers may opt to configure the default setting for price protection set to “off” at the FIX session level. By doing so, only by sending a sending Tag 6820 as “On” will protection be provided.

Handling of Halted Equities

Orders that exist on the ATS book at the time a symbol is halted will be cancelled automatically by Omega ATS. New orders will not be accepted on an equity that has been halted. Order entry and matching will not occur until trading of the equity is resumed. RS can specifically request a trading halt/resume on any equity on the ATS.

Market Open / Trade Resumption

The Omega ATS will be open to trade at 9:30 a.m. Since Omega ATS does not accept orders before the Opening in Phase 1, an opening auction is not necessary at the start of the trading day (or prior to the resumption of trading in a halted symbol).

Attribution

Although the default value for attribution on Omega ATS is Anonymous, pre-trade and post-trade attribution is supported. See FIX Tag 6761 in Omega Specification v1.15.

Trade Settlement

Subscribers trade directly with the contra-party on Omega ATS and settle through CDS. Omega ATS sends a trade file to CDS at the end of each trading day for settlement. Subscribers or their carrying broker, if applicable, must mark **OMEG** as the marketplace on their CDS file submission.

Trade Cancellations

RS has the authority to cancel orders and/or “bust” trades. Omega ATS will also bust any trade which it otherwise deems to be clearly erroneous, in accordance with the [Omega ATS Clearly Erroneous Policy](#). Trades busted on trade date will not be included in the CDS trade file and will be removed from the trading record. In such cases, modified trade information will be included in both the Omega ATS CDS file and the trading tape.

RS Fees

Omega ATS pays RS fees directly on behalf of Subscribers and applies those fee to Subscriber's month-end statements.

Billing

Subscribers are required to participate in Pre-Authorized Debit Plan.

Subscribers are provided daily reporting (T+1). Omega users can drill down to daily data for Added and Removed shares. Information available includes:

- Shares Added
- Rebate Rate for Add Liquidity
- Total Rebate of all Added Shares
- Shares Removed
- Charge Rate for Remove Liquidity
- Total Charge of all Removed Shares

On the first business day of the month, Subscribers will have the entire previous month's liquidity take charge and liquidity make rebates. On or about the third business day of each month, a Subscriber's RS fees are added to online statements and invoices.

Contacts

Greg King (416) 646-2764 gking@omegaats.com

Other contacts:

- Daily operations assistance and production marketplace issues: operations@omegaats.com
- General customer support matters: support@omegaats.com
- Information on becoming an Omega subscriber: sales@omegaats.com
- Inquires related to compliance: compliance@omegaats.com
- Billing related questions: billing@omegaats.com
- Connection or market data problems in production: selfhelp@omegaats.com