



## **SUBSCRIBER MANUAL**

### **Purpose**

This document explains ICX's policies, procedures and technology. Because the information contained in this document is subject to change at any time please refer to our web site [www.icxats.com](http://www.icxats.com) for the most current updates.

### **ICX Mission Statement**

ICX offers an alternative Canadian marketplace and trading system to registered Investment Dealers and their clients to trade Canadian listed equities. ICX provides VWAP and CBX dark pools to the Canadian market and will participate in the Best Execution process. ICX is based on world-class proven and liquid crossing and alternative trading systems (ATS) running on open-standard and advanced technologies, and designed to maximize speed, performance and reliability.

### **How to Subscribe**

ICX Subscribers must be Canadian Investment Regulatory Organization (CIRO) members in good standing with the ability to clear trades on a continuous net settlement (CNS) basis with the Canadian Depository for Securities (CDS).

The following documents are available to subscribers:

- **ICX Subscriber Agreement** – contract between ICX and subscribers
- **ICX Subscriber Manual** – general policies and procedures (this document)

The following documents are available for vendors:

- **ICX Vendor Agreement** – contract between ICX and vendors

The following technical specifications will also be available for order routing and connectivity:

- **ICX FIX Specification** – orders using FIX format

Please contact ICX at (416) 304-6359 for more information about becoming a subscriber.

## **ICX and UMIR Compliance**

ICX is a CIRO member and as such is subject to applicable rules and principles that govern Canadian broker dealers whose business is restricted to the operation of a marketplace. ICX subscribers must be registered CIRO members.

As the operator of an Alternative Trading System (ATS) – ICX will comply with all applicable UMIR requirements relevant to a marketplace. The Subscribers agreement requires that Subscribers will comply with those requirements of UMIR that apply to the subscribers of a marketplace and that the Subscriber agrees that it will be regulated by CIRO.

### **1. Definitions and Interpretation**

ICX's VWAP orders meet UMIR's definition of a call market.

### **2. Abusive Trading**

Responsibility of the subscriber to comply with UMIR requirements.

### **3. Short Selling**

#### **Restrictions on Short Selling**

Although the subscriber is responsible to comply with UMIR requirements, for CBX trades, the ICX matching engine will assist the subscriber in abiding by the UMIR Prohibition on the entry of short sales orders by enforcing the UMIR restrictions and allowing exemptions where appropriate and as indicated in the subscriber generated FIX message

### **4. Front Running**

Responsibility of the subscriber to comply with UMIR requirements

### **5. Best Execution Obligation**

It is the responsibility of the subscriber to pursue the execution of each client order on the most advantageous execution terms reasonably available under the circumstances. CIRO expects, as one of several general and specific factors, that participants in discharging their best execution obligations will consider possible liquidity on a non-transparent marketplace if the displayed volume in the consolidated market display is not adequate to fully execute the client order on advantageous terms for the client and the non-transparent marketplace has demonstrated there is a reasonable likelihood that the marketplace will have the liquidity for the specific security.

The provision of "best execution" for a client order is subject to compliance with the "best price" obligation. ICX VWAP orders are excluded from the best price obligation and ICX will accommodate compliance on CBX orders by setting prices at NBBO midpoint prices.

## **6. ORDER ENTRY AND EXPOSURE**

### **6.1. Entry of Orders to a Marketplace**

When limit orders are received minimum tick increment for orders entered into the ICX system is \$.01 and \$.005, i.e. one-half of one cent in respect of an order with a price of less than \$.50.

VWAP, and CBX trades will be reported to participants to four decimal places. Trades will be reported to the IP at the nearest trading increment and if the price results in one-half of a trading increment the price shall be rounded up to the next trading increment unless otherwise permitted by the IP or information vendor.

### **6.2. Designation and Identifiers**

ICX supports the following markers:

Client  
Non-Client  
Inventory  
Program Trade  
Principal Trade  
Wash trade  
Insider Account  
Significant Shareholder  
Jitney  
Market Maker  
Options Market Maker  
Short Sale  
Short Marking Exempt

## **7. Trading in a Marketplace**

Responsibility of the subscriber to comply with UMIR requirements

## **8. Principal Trading**

Responsibility of the subscriber to comply with UMIR requirements

## **9. Trading Halts, Delays and Suspensions**

ICX will Halt, Delay, Suspend or otherwise prevent trading in securities

- As required by UMIR, CIRO, or an SRO
- Additionally, at its own discretion when it deems necessary

## **10. Compliance**

### **10.1 Compliance Requirements**

ICX will comply with the applicable requirements, the Market Operation Instrument and any other applicable securities regulatory requirements.

### **10.2 Audit Trail Requirements**

ICX will maintain electronic records of all order and trade actions made in its system as indicated in the ICX Operations Manual – System Data, and provide the information processor/ vendor information according to UMIR requirements.

All order and trade actions are communicated in electronic FIX format and generate records immediately upon receipt and processing.

### **10.3 Synchronization of Clocks**

ICX trading system is synchronized with atomic clocks and ICX will verify periodically that the clocks are synchronized with the Cesium Clock operated by the National Research Council Canada.

### **10.4 Assignment of Identifiers and Symbols**

Each ICX subscriber will be assigned a unique identifier which will be included in all FIX messages for attribution purposes.

Each security that trades on the ICX will be uniquely identified by any of the following:

- Instinet Symbol (exchange symbol)
- RIC
- ISIN
- SEDOL
- CUSIP

### **VWAP Cross**

The VWAP Cross will provide a benchmark cross at the day's VWAP (Volume Weighted Average Price). VWAP is a standard trading benchmark for average price level of a stock, which is ratio of the value traded to total volume traded over a particular time horizon (in this case for the day). ICX will calculate the daily Canadian VWAP for listed stocks based on real-time feeds from consolidating Canadian marketplaces.

The VWAP Cross will operate a point-in-time cross prior to the TSX market open and matches will execute at the daily VWAP price. Executions are locked in at match time, and priced at VWAP after the close. VWAP pricing will take the day's consolidated market data feeds from Canadian markets. All Canadian registered Participating Organizations (Broker Dealers) will have the ability to participate in ICX. A variety of

interfaces will be available to enter orders into ICX including Instinet and other EMS platforms and FIX connectivity. Order functionality for the VWAP Cross will include market orders and minimum fills.

### **CBX**

The Continuous Block Cross ("CBX") has been designed for price improvement and anonymous trading. Crosses will occur at CBBO mid-point whenever there is sufficient volume to match at least one board lot.

### **Trading Hours**

The ICX VWAP Cross will allow subscribers to access the point-in-time cross for all TSX and TSX Venture listed stocks. Orders may be entered starting at **7:00 AM EST** and the match will occur at **9:15 AM EST**. Matches will use the Canadian Consolidated VWAP price at **4:10PM**.

ICX cross service CBX shall allow Subscribers to trade between the hours of **9:30 a.m. and 4:00 p.m.** (Eastern Time) on trading days

### **Holiday Schedule**

The system will be available for trading on all business days – Monday through Friday inclusive, excluding Canadian Statutory Holidays.

### **Eligible Securities**

ICX offers trading in all Canadian listed securities (equities only) denominated in Canadian dollars.

### **Order Entry Interface**

FIX, or Financial Information eXchange, is an industry standardized protocol that allows ICX Subscribers to enter, revise and cancel orders, and receive executions. It allows Subscribers and their software developers to integrate ICX into their proprietary trading systems or build custom front ends. All orders are entered via FIX into the Core Matching Engine in the ICX FIX protocol, with Canada-specific and UMIR required fields.

Instinet Canada Cross destinations such as VWAP Cross will be made available on Instinet's EMS platforms such as Newport and Portal. Instinet will also work with any EMS/OMS vendors to allow for access and connectivity from those platforms. Other order interfaces will also be made available in order allow for maximum access by dealers and clients.

## **Market Data**

ICX will be closed and not provide IOI's, orders routed or quotes in public markets. ICX trade prints will be sent to CISO and provided to market data providers (e.g. TSX Datalinx, Thomson Reuters, Bloomberg) as well as to TMX IP.

VWAP pricing will be calculated using direct Canadian marketplace feeds and consolidated by Instinet for VWAP at 4:10PM and sent to matched subscribers and available to the market. CBX pricing will be NBBO midpoint at time of match.

ICX will produce and provide end-of-day files on all trades including symbol and price.

## **Order Handling, Types and Instructions**

**Matching Engine** – The ICX Alternative Trading System will utilize the US Crossing infrastructure and accepts Canadian buy and sell orders from system Subscribers. All ICX orders are fully anonymous.

Orders accepted by the VWAP Cross are either matched at the published interval times and priced at the consolidated 4:10PM end-of-day VWAP, or if they are not matched are rejected and the client is notified.

Orders entered into CBX that are not matched, unless IOC or FOK, are "posted" in the engine's order book, a dynamically updating real-time database of limit orders, so they can be subsequently matched. No IOI's and quotations for orders posted in the ICX book will be disseminated to system Subscribers. No Subscriber's identity is disclosed pre-trade or during the execution process. Full post-trade transparency will be available.

**Minimum Price Increment** – ICX's CBX dark pools will allow the entry of orders in the minimum tick increment allowed by UMIR:

- For stocks with a previous close price  $\geq$  \$.50 a minimum price increment of \$.01 CAD
- For stocks with a previous close price  $<$  \$.50 a minimum price increment of \$.005

**Minimum Volume Increment** – VWAP Cross and CBX will have a minimum volume of one board lot and allow 100 share increments.

## **ICX Access**

Multiple solutions to access VWAP, BLX and CBX matches:

- Instinet Newport 3 and Trading Portal applications
- Cross-connect at primary data centre
- Cross-connect or extranet connection at Instinet Back-up data center in New Jersey

## **ICX Pricing**

ICX pricing mechanisms are as follows:

- VWAP Cross – matched orders are priced using the consolidated VWAP price (calculated from direct feeds and compared to Bloomberg’s VWAP price for confirmation purposes) at 4:10PM. VWAP price calculated from Canadian marketplaces’ direct feeds (TMX, Alpha, Pure, Chi-X Canada, Omega and MatchNow), consolidated by Instinet and the VWAP calculated. We will include all trades in the VWAP as the standard practice.
- CBX –matched orders meeting regulatory minimums for board lots are priced using the NBBO mid-point at the time of the match.

## **VWAP and CBX Cross Allocation of Trades**

The VWAP Cross will allocate trades on a pro-rata basis, based on order volume sent to the matches. CBX crosses will be matched on a broker-time priority.

## **Risk Controls and Order Enhancements**

- Minimum Fill: Subscribers can place minimum execution constraints on their portfolio or individual names
- Price Limits: Subscribers can limit exposure in CBX by setting price constraints
- Volatility Protection: We will monitor after-hours trading until the match runs.
- Halting Policy: We will monitor any Halts in primary markets and apply to ICX
- Cost Savings: Crossing confidentiality eliminates market impact. Complete anonymity allows unfilled orders to be never seen in the market and midpoint pricing in CBX saves execution costs on the spread.

## **Anti-Gaming Controls**

CBX’s mid-point pricing) protect information and reduce gaming risk. Unlike some continuous crossing pools CBX matches cannot be pinged to expose interest levels, making them unattractive to information-seeking traders.

## **Halts, Delayed Opens and Adherence to Primary Market (TMX)**

ICX will halt and open securities inline with the primary market. Similarly Delayed Opens and other market events imposed by the primary market will be followed. A Halted security may still have a match and trade in the VWAP Cross while open and the VWAP will be calculated based on the trading day. A security that does not Open on a particular day will not receive matches that day.

Market place event	Marketplace facility used	Description of Order Treatment
Delayed Open or Halt before Open	VWAP and CBX	VWAP Cross and CBX orders will accept orders and match dependent on security opening. VWAP calculated based on portion of day security is open
Security does not Open	VWAP and CBX	Orders and matches will be rejected.
Halted during Day and reopens	VWAP and CBX	VWAP and CBX will accept orders. VWAP calculated based on portion of day security is open .
Halted during Day and does not reopen	VWAP and CBX	VWAP Cross and CBX will accept orders while open. VWAP calculated based on portion of day security is open.

## ICX Order Types

### VWAP Cross

- Supports Market Order, Volume, Minimum Fill and All-Or None (AON). Limit orders not available.

### CBX

- Supports Market Order, Limit Order, Volume, Minimum Fill (Pro rata), Expiration (Day, GTD,)

## Time in Force Conditions

**DAY** – A Day Order will remain live on the ICX book for the duration of the trading day or until cancelled in the course of the trading day by the subscriber. At the end of the ICX trading day (4:00 pm Eastern Time) all outstanding, unfilled Day orders will be cancelled.

**GTD** – A “Good ‘Til Date” (GTD) order expires at the end of the ICX trading day (4:00 pm Eastern Standard Time) specified.

## VWAP Orders & Pricing Process

1. Buy and Sell Orders are sent to the VWAP Cross destination via Newport, Portal, FIX, other EMS/OMS platforms etc before 9:15AM.
2. Matched orders will be ‘locked in’ to end-of-day VWAP price.
3. When cross is done, an indicative fill is sent out – price of fill will be the previous close price. Reprice is done to the VWAP when the reprice event is sent.
4. Un-matched orders will be cancelled and the subscribers will be notified.
5. Matched orders will be priced at 4:10PM consolidated Canadian VWAP price calculated from direct market feeds.



6. VWAP pricing up to 4 decimal points.
7. Matches will be printed on ICX and fills details will be sent to subscribers, IP (Information Processor), CDS and CIRO.

### **CBX Orders & Pricing Process**

1. Accumulation: Orders are sent in to CBX. Market and limit orders are designated IOC or FOK are, if not matched in the CBX cancelled back to the subscriber
2. When at least one board lot can be matched, the CBX price is set by calculating the NBBO midpoint at the time of the match. Once the price is set, the match executes based on broker- time priority.
3. Prints: Prints on ICX are sent to subscribers, the IP and CIRO

### **ICX Special Cases and Special Terms Order Handling**

<b>Order Type</b>	<b>Order Treatment</b>	<b>Description</b>
Opening Orders	REJECT	Limit/ Market On Open orders are not available and rejected.
VWAP Cross Order Post-9:15AM	REJECT	VWAP Cross orders post 9:15 are rejected.
Market/Limit Orders Pre-9:30 a.m.	CBX Cross	CBX Market and Limit Orders pre-9:30 go directly to the Cross order book as an open order.
Market/Limit Orders between 9:30 a.m. and 5:00 p.m.	CBX Cross	CBX Market and Limit Orders between 9:30 and 5:00 go directly to the Cross order book as an open order. Rejected post 5:00.
Closing Orders	REJECT	Limit On Close orders are not available and rejected.
GTC	REJECT	Good Till Cancel orders are rejected.
Odd Lots	REJECT	Orders less than 100 shares will be rejected.
Special Terms Limit Order	VWAPand CBX	Some Special Terms orders will be accepted such as AON, and Min Qty parameters.

### **Publication of Pre and Post Trade Information**

A pre and post trade data feed can be available to CIRO. Post trade data will be sent to CDS, CIRO and TSX IP for post trade transparency. Pre trade data is available for VWAP and CBX as required by regulators, but not offered to subscribers. The post trade

data feed will continue to be offered to all clients and vendors who sign a contract of use.

## Clearing and Settlement

### Clearing

ICX will operate under the ATS clearing model.

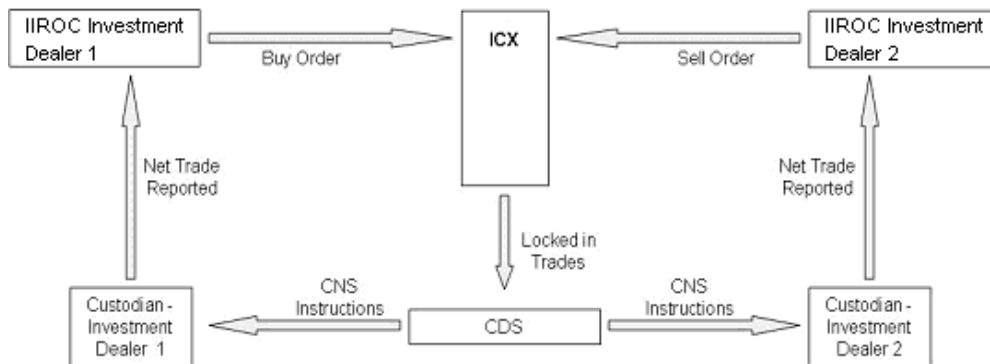
Locked-in subscriber trades will be reported at the end of the day by ICX to CDS with counterparty disclosed.

Subscribers will report the trades to their custodians who will in turn report allocations to CDS

On T+1 ICX Subscribers review the CDS trade comparison reporting based on trades submitted to CDS from ICX and the custodian

On settlement date CDS, via the CNS process, will debit/credit Subscriber custodians' CDS ledger and bank account for the trades

#### Clearing Model - Exchange



### Settlement

All trades done on ICX will settle regular way on T+2.

In the case of a special direction for clearing and settlement from the primary exchange ICX will make the appropriate adjustments to indicate the special clearing (as agreed upon with CDS) to ICX's end of day file before the file is shipped off to CDS.

## **Clearly Erroneous Trade Policy**

*Definition - the execution of an order to buy, sell, or sell short a security, entered in error (e.g. in terms of price, quantity, side or symbol) at a price substantially away from, or inconsistent with, the prevailing market price for that security at the time of execution.*

Trade rulings are made exclusively by CIRO.

ICX reserves the right to initiate a review of a clearly erroneous transaction, regardless of whether or not a member request has been submitted, if it determines in its sole discretion that circumstances warrant such a review. If all subscribers involved with the trade consent, ICX will cancel or amend the trade or details subject to the approval of the regulation service provider.

ICX will facilitate the cancellation of any transactions where the regulation service provider has determined the transaction is null and void. If the regulation service provider determines that an amendment of a material term is necessary, ICX shall instruct the relevant parties to cancel and correct the execution.

## **Marketplace Thresholds**

In accordance with CIRO Notice 15-0186, ICX has implemented price thresholds beyond which orders will be prevented from trading. Orders which if executed would exceed the price thresholds established by CIRO will be rejected back to the Participant. The marketplace thresholds apply during the hours of 9:30 to 4:00 p.m. ET.

The thresholds will measure against two reference prices: the national last sale price and the national last sale price established at one-minute intervals.

Marketplace thresholds will not apply to VWAP orders.

ICX may set price levels tighter than those established by CIRO. Any deviation from CIRO price thresholds will be disclosed on the ICX website.