



Kai-X Service Guide

Chi-X Japan

V1.3

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DOCUMENT HISTORY

ITEM	CHANGE	VERSION	CHANGE BY
1	Initial Version	0.1	
2	<ul style="list-style-type: none"> ➤ Adjusted the matching times. ➤ Added Cancel-on-TostNET-failure feature in section 3.4 ➤ Modified 3.1 Market Coverage related to Margin. ➤ Modified 3.8, modified the explanation of handling orders ➤ Modified "Contact" - Added Market Operations contact to Contact ➤ Modified 5.2, The MQ will be ignored and changed MFQ to MQ and added explanation. ➤ Amended 3.8 Trade Suspension/Halt. ➤ Amended 3.10 Match Cancellation. ➤ Amended Minimum Lot Size. 	1.0	Samson Yuen
3	Changed Lot Size (3.6) and added Tick Size (3.7)	1.1	Samson Yuen
4	Modified Capital Limit Check and added Kill Switch in 3.4 Risk Controls	1.2	Samson Yuen
5	Modified 5.4 Self Trade Prevention to differentiate between Participant-specific STP and Universal STP. Added 5.5 Dynamic Limit Price.	1.3	Samson Yuen
6	Added 5.4 Added Work procedure for Self Trade Prevention to differentiate between Participant-specific STP and Universal STP.	1.4	Satoko Motojo

1. Introduction

Kai-X is an intermediary service in which Chi-X Japan receives and matches orders from participants systematically. This document is designed to share information to help prepare prospective participants to better understand the services and functionality of Kai-X. In addition, high level technical specifications are outlined to assist in the analysis and design of your infrastructure.

Further detailed information, such as connectivity or technical specifications/requirements will be provided once the participant has initiated the on-boarding process. For any questions regarding the material presented in this document please contact anyone listed in the Contact section.

2. Eligibility

Chi-X Japan will provide Kai-X service exclusively for registered broker-dealer participants in Japan who are members of the Financial Instruments Exchange (hereinafter refer to as the Exchange) on which the securities being transacted are listed.

3. Service Features

Kai-X is an intermediary service in which Chi-X Japan receives and matches orders from participants systematically. After orders are matched, Kai-X notifies the respective participant with information necessary for the participant to perform off-auction matching (ToSTNeT for securities listed on Tokyo Stock Exchange) with minimal delay. Participants also have an option to use the Kai-X Supplemental Service (Supplemental Service) for the off-auction submission.

The Supplemental Service submits the orders matched at Kai-X to ToSTNeT on behalf of the participant. Specifically, when an order is matched at Kai-X, the details of the matched order will be forwarded electronically to ToSTNeT via a software service provided by Chi-X utilizing a dedicated virtual server registered under the participant's name. Orders submitted via the Supplemental Service are under the name and responsibility of the participant.

Kai-X Supplemental Service

Kai-X Supplemental Service (Supplemental Service) is a software service that forwards orders that are matched in Kai-X to the TSE ToSTNeT system for execution. The software and hardware for the Supplemental Service is hosted in the Chi-X datacenter and supported by Chi-X as an ISV approved by the Tokyo Stock Exchange (TSE.)

As part of the procedure for subscribing to the Supplemental Service, Chi-X will provide to TSE the contact information of the participant who intends to subscribe. TSE will then request the participant to sign and submit the "Written Assurance Regarding Management of ToSTNeT System Virtual Servers" (Assurance.) The submission of the signed Assurance to TSE is a pre-requisite for the commencement of the Supplemental Service.

In the event of a dispute in the orders executed on ToSTNeT forwarded by the Supplemental Service, Chi-X and the involved parties will take responsibility for and make best effort in resolving the dispute.

If a participant chooses to use the Supplemental Service, they should indicate that in the participant questionnaire when assigning up for Kai-X.

3.1 Market Coverage

Eligible securities are selected by Chi-X Japan from listed cash equities (including investment trusts such as ETFs) in Japan. Margin Trading is not supported on Kai-X until further notice. The securities list will be made available on Chi-X Japan SFTP servers. Participants may access their SFTP accounts around 20:00 to pick up the file.

3.2 Service Hours and Schedule

Open 8:20 – 15:00 on business days

Order matching only occurs when best bid and offer prices are available on the Financial Instruments Exchange on which the security is listed.

Schedule

Below is the schedule for order matching on TSE-listed securities:

ITEM	TIME	ACTION
Participant Connectivity	07:00	Allow participants to connect. No order entry, modification or cancellation is permitted.
Open Kai-X	08:20	Start receiving orders.
AM Open TSE	09:00	Start order matching (for those names with best bid and offer on TSE.)
AM Close TSE	11:30	TSE closes. Stop Order Matching. Keep existing orders. Continue to accept new orders.
PM Open TSE	12:30	TSE reopens. Resumes order matching (for those names with best bid and offer on TSE.)
PM Close TSE	15:00	TSE closes. Stops order matching and stops accepting new orders.
Close Kai-X	15:05	All open orders are expired. FIX message sent to participants that orders are expired
Participants Disconnect	18:00	Disconnect all participants' sessions (FIX etc.)

Note: All times are in Japan Standard time.

3.3 Currencies

Japanese Yen.

3.4 Risk Controls

Native Risk Controls in Chi-X Japan include the following:

1. Capital Limit Check: Limit on maximum value per order. Hard limit per session at Participant level by notional value per order set to effectively enforce our surveillance function. ¹ This check is performed once at order entry at Kai-X and again for the matched portion before it is submitted to ToSTNeT via the Kai-X Supplemental Service. The same limit will be used for both checks.

¹ Calculation of notional value limit(s):

For Peg orders: Quantity X Corporate Action-adjusted previous day's closing price, where Quantity = Lot Size of a stock X No. of Lots

2. Size Limit Check: Limit on maximum number of lots per order. Hard limit per session at Participant level by number of lots per order
3. Cancel on Disconnect (FIX): All open orders for a given FIX session when the FIX session becomes disconnected will be cancelled. (Upon request option to disable will be allowed)
4. Cancel on ToSTNeT Failure: All open orders and matched orders pending ToSTNeT confirmation for a given participant will be cancelled when the following occurs:
 - the participant's ToSTNeT session disconnected, or
 - when an order submitted to ToSTNeT timed out (signaling a problem.)No new orders will be accepted via the FIX session from the participant until the ToSTNeT session is confirmed to be stable. Timeout period for the ToSTNeT order submission is set to 30 seconds.
5. Kill Switch: a participant can use this service to stop order submission on their FIX sessions and ToSTNeT session used in the Supplemental Service. The Kill Switch service is available as part of a Drop Copy (DCP) session in the FIX protocol. By sending special FIX messages (see Kai-X System Interface Specification for details), the participant can:
 - Stop_ToSTNeT – order submission to ToSTNeT will be stopped; orders submitted to Kai-X via FIX sessions will be rejected; all open orders will be cancelled.
 - Resume_ToSTNeT – order submission to ToSTNeT and Kai-X will be resumed.

3.5 Market Model

Kai-X performs one-to-one matching of participants' orders based on specified prices, and on the following priority:

1. Orders from the same participant have priority over orders from other participants.
2. Orders arrived earlier have priority over subsequently arriving orders.

Executed notional amount is rounded down to the nearest yen.

3.6 Round Lot Size

Same as TSE.

3.7 Tick Size

Tick size for all securities in Kai-X is 0.01 yen with the exception of those with Round Lot Size of 1 and 10, of which the tick size is 1 yen and 0.1 yen respectively.

3.8 Surveillance Function

Chi-X Japan will perform surveillance activities to ensure smooth and proper order matching.

Hard limit per session (Participant level by Lot size/Notional value) is also set to effectively enforce our surveillance function (See Risk Controls).

3.9 Matching Suspension/Halt

Chi-X Japan may suspend or halt order matching in case of the following:

Symbol Suspension/Halt

- The Exchange has suspended trading of the same security in accordance with its regulations
- Other cases in which Chi-X Japan deems necessary

Handling of orders

- *No order matching occurs during suspension.*
- New orders, amendment and cancellation to existing orders are permitted during symbol suspension.
- Orders matched just prior to the symbol suspension shall only be executed when accepted by the primary exchange (ToSTNET.)

3.10 Order Cancellation

Cancellation of open orders must be placed through the Participant's order submission system as per Kai-X System Interface Specification. Should the Participant be unable to do so due to system issues, cancellation may be requested by an authorized person as identified on the Supplemental Questionnaire placing a phone call to Chi-X Japan. Chi-X Japan accepts cancellation of all open orders only. Individual order cancellation is not accepted.

3.11 Match Cancellation

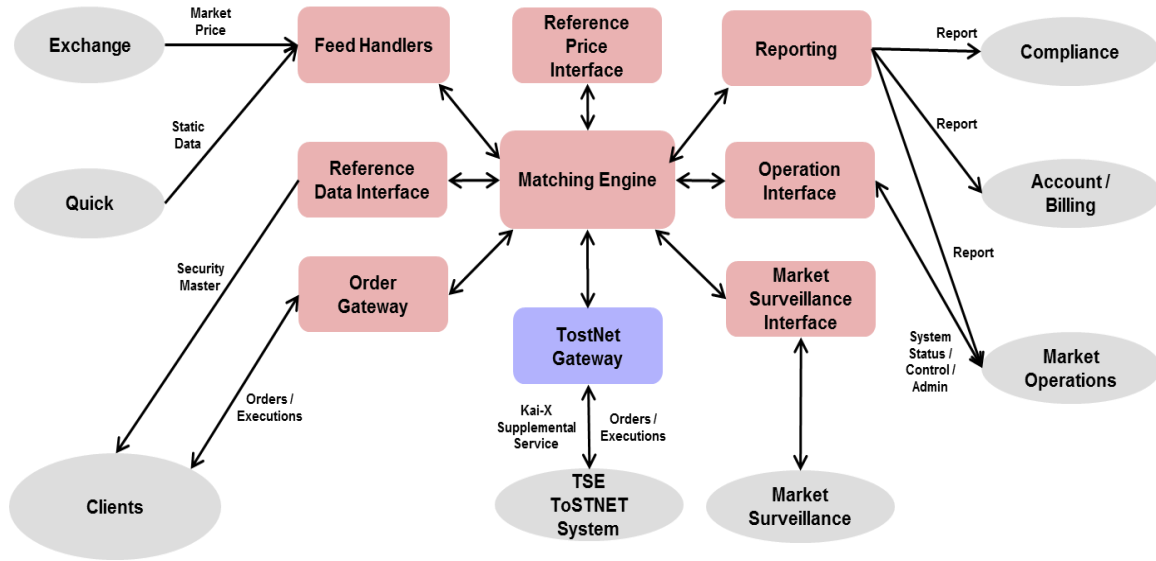
Chi-X Japan will not cancel any matches that have been executed on ToSTNET. For those that have not been executed on ToSTNET, Chi-X Japan may cancel them under exceptional circumstances such as system trouble.

3.12 Pricing Model

Fees and other charges related to Kai-X participation will be disclosed in the Price List and other documents

4. System Structure Diagram

Chi-X Japan Kai-X System



5. Order Types and Features

We support the following order types and features:

5.1 Pegged Order

Definition

A pegged order is an order to buy or sell the stated quantity of a security at a price set to track a reference price². A pegged order can be re-priced based upon the movement of the BBO on the Exchange. When Special Quote is in effect, pegged orders will not participate in the matching process. If the limit price of a pegged order is re-priced, it will take lower priority to orders already on the book at the same price. There are three types of price tracking supported:

Mid Pegged Order:

A mid pegged order is an order pegged to the mid-price on the Exchange. If an order is priced, the order is pegged up (for buy order) or down (for sell order) to the specified limit. The rounding methodology followed is: Buy orders are rounded down and sell orders are rounded up, to the applicable tick of the price.

Primary Pegged Order:

A primary pegged order is an order pegged to the best bid (for buy order) or offer (for sell order) on the Primary Market. The order may be priced or un-priced. If an order is priced, the order is pegged up (for buy order) or down (for sell order) to the specified limit.

Market Pegged Order:

A market pegged order is an order pegged to the opposite side at a price equal to that on the Primary Market. In other words, for a market pegged buy order, it is set to track the best ask price in the Primary Market. For a market pegged sell order, it is set to track the best bid price in the primary market. If an order is priced, the order is pegged up (for buy order) or down (for sell order) to the specified limit.

5.2 Minimum Quantity (MQ)

If an order is specified to have a Minimum Quantity, matching of the order will only occur when there is another order with enough quantity on the opposite side to fulfill the MQ. If remaining quantity is less than the specified MQ, the MQ will be ignored.

5.3 Time in Force:

- **Day:** Order which is effective for the day
- **Immediate or Cancel:** Limit orders are executed at one time. If the order is not executed in full at one time, the remaining portion is cancelled before showing on the order book. In the FIX message, it shows as "Cancelled" but the behavior itself would be treated as "Expired"

- **Fill or Kill:** Limit orders are executed fully at one time. If the order is not executed in its entirety, the order is cancelled

5.4 Self-Trade Prevention

This functionality prevents specially tagged orders from matching against other similarly tagged orders. There are two kinds of Self-Trade Prevention (STP):

5.4.1 Participant-specific STP

Orders tagged with the same identifier submitted by the same participant will not be matched. However, the orders will be matched against other orders or remain on the book waiting to be matched.

5.4.2 Universal STP

Orders tagged with the same identifier will not be matched, regardless of originating participant(s). However, the orders will be matched against other orders with different identifiers or without identifiers.

Please contact Chi-X Japan, Client Service to start using this function. Chi-X will give the participant a specific identifier to the end client of the participant who wants to use this feature. By filling the identifier in Tag7714, the order will not be matched against the orders with the same identifier.

Please refer to Kai-X System Interface Specification (v1.32 or later) for details.

5.5 Dynamic Price Limit

When submitting a new order, the participant can specify a dynamic price limit for the order. The dynamic limit price for a Buy (Sell) order is the most recent primary exchange high (low) price for that day at the time of order entry.

The dynamic limit price can be used in conjunction with an explicit (static) limit price. In this case, when an order is re-priced,

Effective Price = min(Limit Price, latest Primary Day High) for Buy orders, and
Effective Price = max(Limit Price, latest Primary Day Low) for Sell orders.

6. Participant Connectivity Guide

Participants must comply with the Connectivity Guide which will provide more detail for connectivity analysis design and implementation. However, the following should serve as a high level description of items to consider and information to have ready:

6.1 Services and Protocols

- Order Submission – Available in FIX 4.2 Protocol

6.2 FIX Connectivity

In addition to FIX 4.2 standard messages, there will be additional customization needed in the following areas:

- Support for Quick/local symbology for submission of orders
- Handling of reject messages for order types that are not supported by Chi-X Japan

- Support for specific pre-order checking required by the Chi-X Japan

Detailed FIX Connectivity guide will be available as a separate document.

6.3 Testing

Once connectivity is set up testing will be required. Participants can send orders to our test environment and receive messages back. The participant will be responsible for their own test scenarios.

Testing session bundles will be issued by Chi-X Japan support.

6.4 Certification

Once testing is successfully completed, certification will be obtained and migration to production can occur. Chi-X Japan will provide the certification script. The certification process will be manual and an appointment will be required.

7. Documentation

As part of the on-boarding process, there will be a set of documents to be reviewed and completed. A complete set of the below documentation will be delivered once the participant has decided to join.

- Account Opening Form
- Supplemental Questionnaire
- Insider Registration Form
- General Terms and Conditions
- Rulebook
- Service Guide
- Personal Information Protection Policy

8. Reports

Commission Invoice

Commission Invoices are generated monthly
Format: Read Only PDF

Daily Activity Report

Daily Activity Report is a CSV file generated every business day after close of business. This report is available for participants to download from our SFTP site (details to be provided)
Format: CSV file

Contacts

For questions and support, contact details are below:

General Questions to -
jp.client.service@chi-x.com

Operational/Technical Support to -

jp.market.operation@chi-x.com

Client Service	03-6366-8899
Market Operations	03-6366-8877

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