

Credit Suisse Asia Pacific Crossfinder User Guidelines 2020

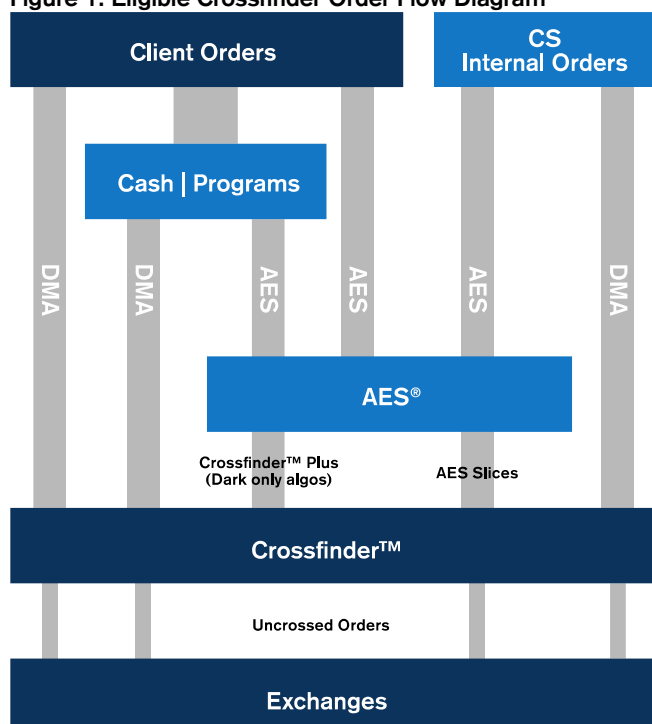
Crossfinder User Guidelines Asia Pacific

Important Matters Relating to Orders Routed to Crossfinder

Crossfinder is Credit Suisse's alternative execution platform that anonymously crosses buy and sell orders for the same security.

All Crossfinder executions are within the exchange quoted best bid and offer prices, endeavoring to provide you with higher fill rates and better execution prices.

Figure 1: Eligible Crossfinder Order Flow Diagram



Permitted Users

Crossfinder Japan is available for professional clients as defined by Article 2, Paragraph 31 of the Financial Instruments and Exchange Act including Credit Suisse Securities (Japan) Limited (CSJL) and its affiliates.

Crossfinder Hong Kong is available only for users who are Qualified Investors as defined under SFC Code of Conduct Paragraph 19.2(f).

Crossfinder Australia is available for wholesale clients as defined by section 761G of the Corporations Act including affiliates of Credit Suisse Equities (Australia) Limited.

Order Handling

Eligible orders are routed to Crossfinder by default unless specific opt-out instructions are provided.

Order flow directed to both electronic (direct access) and desk (worked) channels become eligible for matching in Crossfinder.

Connection to Credit Suisse's electronic trading platform is via the industry standard FIX protocol.

Credit Suisse reserves the right to grant or revoke access to Crossfinder. Orders submitted to Crossfinder are subject to controls deemed suitable by Credit Suisse. Credit Suisse reserves the right to amend such controls periodically.

Available Options and Controls

Crossfinder provides clients with extensive controls and parameters to manage order types, minimum fill sizes, price pegging and counterparty selection.

Private (dark only) vs. Public Orders (default): There are two ways to access Crossfinder for Direct Market Access (DMA) orders. In Private mode, orders will be subject to matching against other Crossfinder orders only. In Public mode, (the default option), orders will be subject to matching against other Crossfinder orders as well as orders on the exchange. This can be controlled in a variety of ways as long as the connectivity is appropriately pre-arranged with Credit Suisse Technology.

Counterparty Selection: Participants are categorized based upon the nature of their order flow and subsequently measured for negative selection using our proprietary methodologies - please refer to the Risk and Disclosure section for the definitions. One or more of these categories can be excluded from your counterparty selection. This setting will affect all orders and the default is to cross against all participants except Opportunistic category.

Matching Price: Orders are matched at or within the Bid/Offer Spread. Crossfinder offers the following additional price restriction: Mid-Price or Better*

* This setting will affect all orders, and the default is to execute at any price at or within the prevailing bid/offer spread subject to prevailing market rules. In Australia specifically, the default transaction is executed at a price which is higher than the best available bid and lower than the best available offer by one or more price steps or at the best mid-point.

Minimum Acceptable Quantity (MAQ): The default setting is the minimum of either one lot or an order quantity that satisfies the applicable regulatory minimum size.

To avoid small crosses a minimum acceptable quantity can be set by the user**:

- An MAQ can be specified as a fixed number of shares, on an order by order basis.
- A Dynamic MAQ*** can be enabled that uses the symbol specific historical average trade size as a base line for minimum quantity. This can be further adjusted by employing a desired factor: for example to 0.5x or 2x the average trade size.

** In each of these configurations, Crossfinder may fill less than the MAQ size, under the condition that it can execute 100% of the currently posted slice.

*** Dynamic MAQ is only supported for a subset of the AES Algorithms.

No Self-Crossing: In order to avoid crossing orders against yourself, you may elect to turn No Self-Crossing on.

Cross/No-Cross Flags: For Public DMA orders, there is support for FIX tag57 to determine the eligibility to cross on an order-by-order basis.

Opting Out: Participants can choose to exclude their order flow in its entirety from participating in Crossfinder.

Please contact your Credit Suisse representative if you wish to opt-out of Crossfinder, or to discuss the options and controls available to you.

Standard Operating Rules, Procedures and User Priority

Crossfinder executes orders based on the prevailing market rules:

Order priority	Australia	Hong Kong	Japan
Price Priority: Highest price Buy orders, lowest price Sell orders take priority.	Yes	Yes	Yes
Capacity Priority: Agency orders take priority over Principal orders of Credit Suisse and its group of companies. For Agency and Principal orders at the same price level, all Agency orders must be filled first.	No	Yes	No
Time Priority: When an order is entered into the Crossfinder order book, it is assigned a timestamp. The earlier the order is received by Crossfinder the higher the priority.	Yes	Yes	Yes
Counterparty Selection: The ability to opt out of counterparty categories requires that within the price and time priority, matches will only be made if the selection criteria of the opposing orders permit.	Yes	Yes	Yes

Matching and Execution Mechanism

Best Execution

Eligible orders initially pass through Crossfinder and may execute partially or fully. Executions will be in accordance with the specified instructions where the available price is at or better than the prevailing market price.

Crossfinder supports two types of orders:

1. **Private** orders: trade exclusively inside Crossfinder.
2. **Public** (default) orders: are routed to exchange or other lit venue, while simultaneously kept available for trading in Crossfinder.

Both Private and Public orders in Crossfinder are subject to the same matching and execution mechanism.

Private orders are kept within Crossfinder, while Public orders may be kept simultaneously between the Exchange or other Lit or Dark Venues and Crossfinder. Orders are not subject to any intentional or artificial delay beyond the time it takes to process the order.

Unexecuted orders are removed from Crossfinder at the end of the day.

No aggregation of orders is performed in Crossfinder.

When Crossfinder detects a potential matching opportunity for a Public order, it will cancel or reduce the resting external venue order before executing internally. Similarly, any execution in an external venue will reduce or cancel any associated resting order within Crossfinder.

Crossfinder will only allow an order to execute at a price that is equivalent to, or better than the publicly available price.

All trades in Crossfinder are reported in the manner and within the time limit prescribed by the underlying market rules. Trades are settled in accordance with the normal exchange procedures and settlement calendar.

Order Cancellation

Once orders are executed within Crossfinder, they cannot be canceled unless the execution was erroneous and/or both parties of the trade agree to the cancellation, subject to the local rules and regulations.

Transaction Analysis

Upon request, Credit Suisse will also make available transaction analysis concerning the transactions that are conducted on a clients' behalf in Crossfinder.

Figure 2: Comparison of Regional Matching Mechanisms employed by Crossfinder

Market	Matching Mechanism	Minimum Size	Public Order Books	Trade Reporting	Tag 30 - MIC
Australia	Orders can be matched within the National Best Bid Offer (NBBO) of the market in line with current Market Integrity Rules.	NO	ASX Chi-X	ASX Chi-X	CFAU
Hong Kong	Orders can be matched within the best bid/offer of the primary exchange, with trade price rounded to 3 decimal places.	YES (minimum lot size)	SEHK	SEHK	CFHK
Japan	Clients who are set-up for Smart Order Routing (SOR) in Japan will be matched within the NBBO inclusive of Chi-X and SBI. Those who are not set-up for SOR will be matched within the bid/offer of the TSE. Trade prices are rounded up to 2 decimal places.	YES (minimum lot size)	JPX-TSE SBI Japannext Chi-X	JPX ToSTNeT	CFJP

Risks and Disclosure

Classification of Participants

Trading in Crossfinder does not guarantee against negative selection on your executions taking place.

Crossfinder utilizes the proprietary Alpha Score Card® and GameFinder® methodologies to identify participants whose activity contributes to negative price selection.

All counterparties are categorized (based upon the judgment of the AES team) as follows:

-
- **Natural** - Order flow traded through AES algorithms or via Sales Trading desks unless categorized otherwise in LiquidityPlus
 - **LiquidityPlus** - Order flow from internal principal desks, external brokers, dark aggregators and systematic trading participants
 - **Opportunistic*** - Order flow derived from participants in the above categories that frequently exhibit significant short-term alpha according to our Alpha Score Card® and Gamefinder® methodologies
-

Clients can choose to opt-out from interaction with any of the above categories based on their preference to maximize fill rates or maximize price performance. Within the Natural or LiquidityPlus category, you can further refine your selection criteria to exclude/include from the list of participants mentioned above. Please contact your Credit Suisse representative to discuss these options further.

***Opportunistic bucket is default opted-out, please contact your Credit Suisse representative if you wish to opt-in.**

Market Data Latency

- Crossfinder utilizes real time market data connections to ensure that market quotes are up-to-date as far as possible; however, in the unlikely event of infrastructure related issues, there is a risk that the matching price may not match the price in the public market.
- Crossfinder is not offered in co-location or proximity hosting sites.

System Delay or Outage

Crossfinder may be subject to interruption, transmission delay or blackout beyond our control. In particular, Crossfinder obtains pricing information from third parties. The ability of Crossfinder to achieve the performance described in these materials may be impacted by the loss of third party market data or any connectivity related issues.

Counterparty and Default

All transactions in Crossfinder are reported and cleared in the respective local jurisdiction. Procedures around settlement failure will follow the rules of the local market concerned.

Fees and Commissions

There are no separate fees for accessing Crossfinder.

There are no rebates or differential pricing for making or taking liquidity within Crossfinder.

The standard and pre-existing execution commission rates that are in place for your orders will apply.

Outage Procedure

In the unlikely event that Crossfinder experiences a significant outage, Credit Suisse's sales traders will communicate this via a combination of phone, email and/or electronic messaging on a best efforts basis. During an outage, Public orders will by-pass Crossfinder and be directed to the exchange. Private orders will be rejected and existing Private orders will be cancelled and not re-entered following the outage. Please contact your Credit Suisse representatives who can discuss in detail the processes employed in such circumstances.

User Obligations

User will comply with the relevant regulatory requirements; users will have arrangements to monitor the sending of orders to Credit Suisse systems, including Crossfinder. The user will not interfere with the proper functioning of any Credit Suisse system and will advise Credit Suisse immediately should they believe an order or series of orders may have had an unintended effect on the proper operation of the system.

Conflict of Interest

There may be occasions upon which a client order is matched against the principal orders of Credit Suisse (Japan) Limited, Credit Suisse Equities (Australia) Limited, Credit Suisse (Hong Kong) Limited or one of its affiliates. Due to the anonymity of the matching process, you may not be aware that such a trade has occurred until after its execution (e.g. at the time of settlement of the transaction).

Clients trading directly can choose to monitor Crossfinder executions using FIX Tag 30. In order to determine whether orders are transacted against Agency or Principal orders of Credit Suisse, FIX Tag 29 is used. Credit Suisse can provide a breakdown of transactions if this is not visible. Clients of Crossfinder can choose to restrict orders from matching against principal orders, by contacting their Credit Suisse representative to set up the appropriate configuration.

Access Security

Credit Suisse has established information security policies and procedures and has implemented internal controls designed to ensure that during the ordinary course of business no one is permitted to access Crossfinder system components, view the Crossfinder order book, access Crossfinder databases or physical hardware except for technology support to operate and monitor Crossfinder.

In order to provide governance, operational assistance/troubleshooting, as well as for the purpose of trade monitoring and surveillance, access to your historical trading activity will be available to the following Credit Suisse employees:

Role	Reason for access
AES Electronic Sales, Coverage and Product Team	Coverage and Support of your electronic orders
Equity Sales Trading	Visibility on the orders of their own clients
Production Support IT	IT Support
Legal and Compliance	Trade Surveillance
Operations/Trade Support	Booking/Settlement

Crossfinder

Japan Summary

Trading Hours

- Order acceptance: From 08:00 Japan time
- Continuous matching: From 09:00 to 11:29 and 12:30 to 14:59 Japan time

Tradable Securities:

- TSE listed securities (excluding foreign stocks and foreign ETFs)
- Trading Units used in the TSE are applied

Trading Rules

- Continuous matching with price/time priority
- Non-SOR users/clients will reference the BBO of the primary exchange and SOR users will reference the National Best Bid Offer (NBBO) unless otherwise agreed with the user/client
- Crossfinder internal Tick Size is a function of Exchange Tick Size:

Exchange Tick	Crossfinder Tick
<=0.5	0.01
>0.5 and <=5	0.1
>5 and <=100	1
>100	10

Restrictions

- Limit Prices rounded to a nearest passive Crossfinder tick size for the purpose of queue priority calculation
- Trade Price precision is up to 2 decimal places
- Prevent crossing beyond TSE limit High/Low prices
- Will not cross suspended stocks
- Will not cross if resultant price sets new high/low

Order Types

- Order Type: Limit or Market
- Private Orders Time-In-Force: Day, Immediate or Cancel (IOC), Fill or Kill (FOK)
- Public Orders Time-In-Force: Day, Immediate or Cancel (IOC), Good Till Cancel (GTC)
- Execution Instructions: default is Peg to Market. Client can define Peg to Mid/Best Bid/Best Offer

Options and Control

- Private (Crossfinder only) and Public Orders
- Counterparty Filtering
- No Self-Crossing
- Mid-Price or better crossing
- Minimum Acceptable Quantity on per-order basis
- Cross/No-Cross flag on Public Orders

Matching Mechanism

Crossfinder will only allow an order to execute at a price that is equivalent to, or better than the publicly available price. Any outstanding orders will immediately be routed to external exchange, Proprietary Trading System (as defined by Article 26-2-2, Paragraph 7 of the Enforcement Order of the Financial Instruments and Exchange Act, hereafter "PTS") or broker-neutral darkpool (Kai-X*).

* Kai-X, an external broker-neutral dark pool, which is operated by [Chi-X Japan Limited](#) (Financial Instruments Firm Director-General of Kanto Local Finance Bureau (Kinsho) No. 2426, located at Shin-Toyo Akasaka Building 7F 4-9-25 Akasaka Minato-ku Tokyo 107-0052 Japan). Please contact your Credit Suisse representative if you wish your orders to have access to Kai-X.

Orders from customers who are users of both Crossfinder and Smart Order Routing system (hereinafter "SOR") will compare the best quote prices across TSE, Chi-X and SBI Japannext.

Clearing and Settlement

- Crosses printed/reported to exchange (ToSTNeT)
- Market-side clearing and settlement through JSCC as per regular exchange trade

Transaction Analysis

Please contact our sales representative to request Transaction Analysis concerning the transactions that are conducted on a client's behalf in Crossfinder™ or Kai-X, or request for information disclosure that includes the items required under Article 158, Paragraph 8 of the Cabinet Office Order on Financial Instruments Business, etc.

Information of the Darkpool Operator

Credit Suisse Securities (Japan) Limited – a registered Financial Instruments Firm (Director-General of Kanto Local Finance Bureau (Kinsho) No. 66)

Address: Izumi Garden Tower, 1-6-1 Roppongi, Minato-ku, Tokyo 106-0024, Japan

Phone Number: +81 3 4550 9000

Please refer to our website for more information - <https://www.credit-suisse.com/jp/ja/about-us/profiles/profile-ib.html>

Additional Information of SOR and Kai-X

For clients who use our Smart Order Routing system (hereafter "SOR") (i.e. a system which searches for best execution opportunities on multiple trading venues), SOR will attempt to execute what remains on an order after the order has been subjected to internal matching in Crossfinder that is the dark pool system defined under Art 70-2, Para 7 of the Cabinet Office Order on the Financial Instruments Business etc. SOR will only place orders on PTS if it decides that it can execute the orders at a better price or with greater speed and/or liquidity at the same price as the relevant indication price on the principal exchange. When price and speed are deemed to be generally equivalent, it will prioritize venue routing based upon the venue's historical liquidity.

Upon client request, SOR can be configured to access the external broker-neutral dark pool, Kai-X*, to access non-displayed liquidity in order to reduce market impact while trading at a price that is equal or better than the best available visible quote prior to routing to PTS and the TSE. Credit Suisse will send IOC orders to Kai-X prior to lit venues with limits of equivalent to or better than the best quotation on lit venues (TSE and PTS in this case). We also have the option to post dark-only orders on Kai-X. To setup this posting option, additional configuration is required. Please contact our sales representative if you wish for the configuration.

* Kai-X, an external broker-neutral dark pool, which is operated by [Chi-X Japan Limited](#) (Financial Instruments Firm Director-General of Kanto Local Finance Bureau (Kinsho) No. 2426, located at Shin-Toyo Akasaka Building 7F 4-9-25 Akasaka Minato-ku Tokyo 107-0052 Japan).

For information on Kai-X (including, but not limited to, their matching conditions/mechanism and other relevant conditions/logics), please refer to the [Kai-X Service Guide](#) provided by the Chi-X and their [website](#).

Crossfinder

Hong Kong Summary

Trading Hours

- Order acceptance: From 07:00 Hong Kong time
- Continuous matching: From 09:30 to 11:59 and 13:00 to 15:59 Hong Kong time

Trading Rules

- Continuous matching with price/capacity/time priority
- Crossing is restricted to prices at or within HKEx bid/ask spread
- Crossfinder internal Tick Size: Half of HKEx tick size
- Limit Prices rounded to a nearest passive Crossfinder tick size - for the purpose of queue priority calculation
- Trade Price precision is up to 3 decimal places

Restrictions

- Short sells not allowed
- If the Volatility Control Mechanism has been triggered, Crossfinder will suspend crossing in affected stocks
- Will not cross suspended stocks
- Will not cross if resultant price sets new high/low

Order Types

- Order Type: Limit or Market
- Private Orders Time-In-Force: Day, Immediate or Cancel (IOC), Fill or Kill (FOK)
- Public Orders Time-In-Force: Day, Immediate or Cancel (IOC), Good Till Cancel (GTC)
- Execution Instructions: default is Peg to Market. Client can define Peg to Mid/Best Bid/Best Offer

Options and Control

- Private (Crossfinder only) and Public Orders
- Counterparty Filtering
- No Self-Crossing
- Mid-Price or better crossing
- Minimum Acceptable Quantity on a per-order basis
- Cross/No-Cross flag on Public Orders

Clearing and Settlement

- Crosses reported to HKEx
- Market-side clearing and settlement through HKSCC as per regular exchange trade

Crossfinder

Australia Summary

Trading Hours

- Order acceptance: From 07:30 Sydney time
- Continuous matching: From 10:10 to 16:00 Sydney time

Trading Rules

- Continuous matching with price/time priority
- For trades below block trade size: crossing is restricted to prices strictly within the National Best Bid Offer (NBBO) i.e. at a price which is higher than the best available bid and lower than the best available offer by one or more full ASX ticks or at the best mid-point of the NBBO
- For trades above block trade size: crossing is restricted to prices at or within the National Best Bid Offer (NBBO)
- Crossfinder internal Tick Size: Half of ASX tick size
- Limit Prices rounded to a nearest passive Crossfinder tick size - for the purpose of queue priority calculation
- Prevent crossing beyond daily High/Low prices
- Orders are purged at the end of each trading day

Restrictions

- Clients have to agree to comply with the disclosure obligations in Australia by correctly specifying (in the manner required by Credit Suisse) whether the sale is (a) a Covered Short Sale or is (b) a Long Sale at the time of placing the order
- Will not cross suspended stocks
- Will not cross if resultant price sets new high/low

Order Types

- Order Type: Limit or Market
- Private Orders Time-In-Force: Day, Immediate or Cancel (IOC), Fill or Kill (FOK)
- Public Orders Time-In-Force: Day, Immediate or Cancel (IOC), Good Till Cancel (GTC)
- Execution Instructions: default is Peg to Market. Client can define Peg to Mid/Best Bid/Best Offer

Options and Control

- Private (Crossfinder only) and Public Orders
- Counterparty Filtering
- No Self-Crossing
- Mid-Price or better crossing
- Minimum Acceptable Quantity on a per-order basis
- Cross/No-Cross flag on Public Orders

Clearing and Settlement

- Crosses reported to Chi-X and/or ASX. As at the date of publication of these guidelines, all trade reports are done via Chi-X, however this is subject to change at Credit Suisse's discretion.
- Market-side clearing and settlement through ASX Clear as per regular exchange trade