Euronext Derivatives

REQUEST-FOR-CROSS (RFC) FACILITY FOR EQUITY AND INDEX OPTIONS

What is Request-For-Cross?
The Request-for-Cross (RFC) facility is a trading facility that can be used to obtain best execution by submitting a committed cross trade to an open auction.

Who is Request-For-Cross for?
Trading members and investors looking to expose a committed bilateral cross trade (whether standard or Large-in-Scale) to multilateral liquidity to benefit from possible price improvements and central clearing.

Why use Request-For-Cross?
Trading members can use RFC to attain best execution for their own and their clients’ business. RFC allows clients to obtain guaranteed liquidity from their agents, to reduce counterparty risk and risk from order book fluctuations, and to mitigate capital costs and collateral inefficiencies through central clearing.

- Available for equity and index options
- Minimum volume threshold of 1 lot
- Auction period (RFC response period) between 1 and 2 seconds
- Price validation against BBO
- Central clearing via LCH SA

How does the Request-For-Cross facility work?
The RFC is submitted by the RFC Initiator (the member submitting the RFC) using a private message containing both buy and sell side information.

Once an RFC is submitted and validated against the Best Bid and Offer price (BBO), the size of the order and the intended execution price are published and a short auction is triggered, also referred to as the RFC response period.

During the RFC response period, other participants, also referred to as RFC reactors, may choose to match or price-improve the cross level.

Following the RFC response period, the cross is executed. Depending on the prices submitted during the RFC response period, one or more RFC reactors can take part in the cross trade.

Key features of the Request-for-Cross facility
- Best Execution: Guaranteed execution of client volume and possibility for price improvements with €0.01 price increments (tick size).
- Ease of connectivity: RFC orders are submitted directly via the Euronext API using the standard New Order Cross message.
- Efficient alternative to OTC: Access an alternative liquidity pool on-exchange and benefit from reduced counterparty risk and margin offsets via central clearing.

Note: This description of the RFC facility is applicable to equity and index options only. Specific features are applicable to RFC for commodity options.
Example: Request-For-Cross

RFC submission by Initiator

<table>
<thead>
<tr>
<th>Account</th>
<th>Firm</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client</td>
<td>MBR1</td>
<td>100</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BID</th>
<th>ASK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>Quantity</td>
</tr>
<tr>
<td>1.00</td>
<td>100</td>
</tr>
</tbody>
</table>

Reactor orders

<table>
<thead>
<tr>
<th>Firm</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBR3</td>
<td>20</td>
<td>1.10</td>
</tr>
<tr>
<td>MBR5</td>
<td>85</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Additional details of the RFC facility can be found in the Request For Cross Functional Overview, which is available on the Euronext website via Resources > IT documentation > Order Entry > Background Documentation > Derivatives:

www.euronext.com/it-documentation/order-entry

Step A: Execution of Reactor orders that improve price of RFC, against Initiator client account side
- **Trade 1**: MBR2 sells 15 lots to MBR1 client account @ €0.90

Step B: Execution of Reactor orders at RFC price, against Initiator client account side
The quantity available for this matching is maximised in order to give the RFC Initiator a preference. The available quantity is determined via the following rule:
Remaining Tradable RFC Quantity for Reactors = min (RFC quantity left on each side) * 60%: 85 x 60% = 51
- **Trade 2**: MBR4 sells 51 lots to MBR1 client account @ €1.00; MBR4 order remains: Sell 49 lots @ €1.00

Step C: Execution of Reactor orders that improve price of RFC, against Initiator non-client side
The RFC Initiator non-client side can match with Reactors for at maximum the same quantity as was matched by the RFC Initiator Client side in Steps A and B. Matching quantity available for RFC non-client vs Reactor is therefore 66 lots (15 lots of Trade 1 + 51 lots of Trade 2).
- **Trade 3**: MBR3 buys 20 lots from MBR1 house account @ €1.10

Step D: Execution of Reactor orders at RFC price, against Initiator non-client side
The matching quantity available for RFC non-client vs Reactor, as indicated in step C, is 66 lots. This quantity minus the quantity traded in step C (20 lots) leaves 66 − 20 = 46 lots available for step D.
- **Trade 4**: MBR5 buys 46 lots from MBR1 house account @ €1.00; MBR5 order remains: Buy 39 lots @ €1.00

Step E: Final cross-execution
- **Trade 5**: The remaining quantity of RFC Initiator (MBR1) is matched as a cross: 34 lots @ €1.00

Step F: Uncrossing RFC Reactor book
Remaining RFC responses with prices crossed are matched amongst themselves.
- **Trade 6**: MBR5 trades against MBR4 39 lots @ €1.00; MBR4 order remains: Sell 10 lots @ €1.00

Step G: Cancellation of remaining Reactor orders
The following Reactor order is cancelled:
MBR4 10 lots @ €1.00

More information

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04/2019