

Order Functionalities

This topic describes order functionalities. These functions are used to manage the manner in which orders are originated, defined, and execute on the platform.

- [Order Cancellation](#)
- [Order Modification](#)
 - [In-Flight Mitigation \(IFM\)](#)
- [Order States](#)
- [Order Aggressor Indicator](#)
- [Trade Cancellation](#)
 - [GCC Trade Cancellation](#)
- [Request for Quote](#)
- [Request for Cross](#)
- [Mass Order Cancel](#)

Order Cancellation

Order cancellation can occur in the scenarios outlined below for an order that has been accepted by CME Globex.

- Solicited order cancel
 - Cancel request is initiated by client system and cancel acknowledgment is expected result.
- Unsolicited order cancel
 - Cancel acknowledgment sent at order expiration
 - [Cancel on Disconnect \(COD\)](#) – client system is registered for COD and hard disconnect cancels all orders
 - Cancel initiated by FirmSoft
 - Cancel initiated by GCC

See [Execution Report - Order Creation, Cancel, or Modify](#), tag 378-ExecRestatementReason for additional technical information.

Order Modification

Market participants may modify the following open order parameters:

- Account*
- Client order ID
- Increase quantity*
- Decrease quantity
- Customer handling instruction
- Order type*
- Price*
- Time in Force
- ATS indicator
- Give-up instructions
- Stop trigger price*
- Minimum fill quantity*
- Customer of firm flag
- Displayed quantity
- Order expiration date
- Self-Match Prevention ID and instructions
- CTI code
- In-Flight Mitigation (first modification only)



*Modifying these parameters will result in a change of priority of the order in the order book.

In-Flight Mitigation (IFM)

This optional parameter for order modification has the goal of preventing orders from being overfilled. By default, an order modification does not have in-flight mitigation enabled.

The in-flight mitigation functionality prevents an order from being filled for a quantity greater than the quantity requested by the user. It protects from the risk of a resting order being filled between the time an order modification is submitted and the time the order modification is processed and applied to the order.

Comparison of order modification processing with and without in-flight mitigation enabled

Not: this example assumes a match has occurred while the Order Modification was 'in flight'; if a scenario in which no match has occurred, the Order Open Quantity is set to Order Modification Quantity.

Condition	Result
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In-flight mitigation enabled	
Order Modification Quantity > Filled Quantity	Order Open Quantity is set to Order Modification Quantity - Filled Quantity.
Order Modification Quantity < Filled Quantity	Order Open Quantity is cancelled (set to 0).
In-flight mitigation disabled	
Order Modification Quantity > Filled Quantity	Order Open Quantity is set to Order Modification Quantity.
Order Modification Quantity < Filled Quantity	

Order States

Market participants have the opportunity to check the state of their order at any time during a trading session. An order moves through many different states through-out its life cycle.

State	Description
Pending New	The order has been received by the CME Globex platform but not yet acknowledged by the trading engine.
New	The order has been successfully processed, entered in the order book and acknowledged by the trading engine.
Pending Cancel Confirmation	The cancel request has been received by the CME Globex platform but not yet acknowledged by the trading engine.
Cancelled	The cancel request has been successfully processed and acknowledged by the trading engine. The order has been pulled from the order book.
Pending Modification Confirmation	The modification request has been received by the CME Globex platform but not yet acknowledged by the trading engine.
Filled	The full quantity of the order has been matched to another order creating a trade. The order has no remaining quantity on the order book.
Partially Filled	A subset of the order quantity has been matched to another order creating a trade. The order has remaining quantity on the order book.
Unknown	The order identifier for which status has been requested does not exist in the system.
Rejected	The order was rejected.
Expired	The order has been pulled out of the order book because its life expectancy came to an end.

Order Aggressor Indicator

An "**Aggressor**" or "**Aggressing Order**" by definition is an incoming order matching with one or more orders resting on the order book. The Aggressor pulls liquidity out of the order book by triggering a match event removing resting quantity and potentially price level from the order book.

The Aggressor is identified in each order match during the continuous trading period and reported on all three customer interfaces: Order Entry, Market Data and Post-Matching/Clearing. There is no Aggressor indicator for trades occurring at the end of the market opening auction or any other state other than continuous trading.

For trades involving spread instruments, the Aggressor is reported at the spread level only. Meaning, that the aggressor flag is only present in the Fill Notice for the spread summary and the flag is not present in the Fill Notices submitted for the leg components of the spread.

For stop-limit and stop with protection orders, once triggered a stop order is treated as an Aggressor limit order and Fill Notices reflects this behavior.



An implied order is never the Aggressor in a trade during continuous trading.

Trade Cancellation

To balance the adverse effects on market integrity of executing trades and publishing trade information inconsistent with prevailing market conditions, while preserving legitimate expectations of trade certainty by market participants, the [CME Global Command Center \(GCC\)](#) is authorized to adjust trade prices or cancel trades when such action is necessary to mitigate market disrupting events caused by the improper or erroneous use of the electronic trading system or by system defects. The GCC may adjust trade prices or cancel any trade if the GCC determines that allowing the trade to stand as executed may have a material, adverse effect on the integrity of the market. All decisions of the GCC shall be final.

More detailed information on trade price adjustment and trade cancellation can be found in the [CME Globex Rulebook](#), Rule 588.

[GCC Trade Cancellation](#)

If CME Global Command Center (GCC) cancels a trade, the client application receives an [iLink 2 Execution Report - Trade Cancel](#) containing the following information:

- Order status and execution type is set to "H" for trade canceled.
- Execution Type is set to 'H' for trade canceled.
- Execution Reference ID containing the Trade Number for the trade being canceled; the Trade Number as originally contained in the Execution ID of the trade being canceled. The Execution Reference ID in the trade cancellation notice identifies the specific canceled trade.
- Last Shares value is set to the quantity of the trade that is being canceled.

Prior to a trade cancellation, each client involved in the trade has already received an Execution Report - Fill containing an identifier for the Execution report and information on when the order was accepted.

The characters following "TN" in the Execution ID are called the Trade Number. This number is used to identify the trade.

See also: [iLink - Trade Cancellation](#) for message-level details.

Request for Quote

A Request for Quote (RFQ) is a business process used to invite participants into a bidding process for specific products. Brokers and Traders who wish to trade an instrument which may not be particularly liquid use RFQ functionality to request a price from the market and broadcast an interest in trading a particular instrument. An RFQ notifies market participants interested in a specific instrument that a price is *requested* for the market. The RFQ *may* specify the quantity for which a price is required. For additional information, see the functional specification topic [Quote Request - RFQ](#).

Request for Cross

A Request for Cross (RFC) order is a two-sided order submitted by a single party/broker at the same price and quantity. RFC order functionality provides customers submitting RFC orders the best available price with optimal market transparency by allowing market participants to match orders against the RFC order prior to the order matching against itself at the CME Group configured Broker Match Guarantee (BMG) percent, see Best Price Match (BPM) for more details.

Submitting an RFC order is a staged process whereby the client system and CME Globex:

1. Signals intent to submit a Cross order
2. Submits the cross order
3. Notifies the market of the cross
4. The order proceeds through the RFC window.

The RFC window is comprised of three states:

- Pre-Cross
- Cross
- Resume (Normal) Trading

The following section presents the different steps composing the Request for Cross process. Note that the duration of each state is configurable and may be entirely skipped if configured to 0 seconds.

Step 1: Client system submits an iLink Quote Request message with the Side, signaling **intent to next submit a cross order**.

Step 2: Upon receipt of the iLink Quote Acknowledgment message, the client system observes the designated waiting period where applicable and then sends a New Order Cross message with a specific Cross Type.

Pre-Cross State

Step 3: CME Globex broadcasts a Security Status message with the Security Trading Status **indicating the Pre-Cross state to market participants**.

Step 4: During the Pre-Cross state, orders can appear on the book that will match with the cross order during the Cross state.

Step 5: After the configured Pre-Cross time period, CME Globex sends a Security Status message with the Security Trading Status **indicating that the RFC state has changed to Cross**.

Cross State

Step 6: CME Globex will broadcast market data associated with the RFC order and the order book will be updated.

Step 7: During the Cross state, other orders are allowed to match with the cross order and any remaining cross order quantity matches against itself at the Broker Match Guarantee percent.

Step 8: After a CME Globex configurable time period, a Security Status message is sent with the Security Trading Status **indicating Resume (Normal) Trading state**.

Resume Trading State

Mass Order Cancel

This functionality provides a shutdown of all CME Globex activity including:

- Order entry blocked
- All working orders cancelled

Mass Order Cancel can be initiated by registered employees of an Exchange, Clearing Firm, or CME Globex Execution Firm. The Execution Firm is granted access by their Clearing firm. The action is controlled by the Session ID and Firm ID. Select all or a subset of the firm's Session IDs and Firm IDs to execute a Mass Order cancel. An Audit Trail report is available from the GUI.