

iLink 3 Binary Order Entry - EBS Market on CME Globex

Subject to applicable regulatory approvals, the following EBS Market and eFix Matching Service products will be integrated onto the CME Globex platform.

- New York FX Spot
- New York Metals
- London FX Spot
- London Non-Deliverable Forwards (NDFs)

This topic describes the iLink 3 order entry enhancements and messaging impacts introduced for EBS Market including eFix Matching on CME Globex. See full technical information on the [CME Globex platform](#).

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Revision History

Date	Description
May 13, 2022	"iLink 3 Messaging Considerations" - Updated description of using tag 60 and 7552 to determine when a message was received by CME Globex.
May 11, 2022	"OrderID (tag 37)" - Updated second bullet point.
March 9, 2022	Added Optional and Required FIX Tags for EBS Products .
February 17, 2022	EBS iLink 3 Sample Messages updated all tag 5392 values to contain only 3 characters.
January 19, 2022	Removed all references to Execution Report Trade Addendum Outright; no longer in scope
December 16, 2021	Updated EBS MiFID Short Code Identifiers on CME Globex rules.
November 9, 2021	EBS Reject Codes - Added error codes 102 and 107 for Business Reject (tag 35-MessageType=j) message in tag 380-BusinessRejectReason and tag 58-Text.
October 18, 2021	Added EBS Counterparty Dissemination section.
July 30, 2021	Added examples to Self Match Prevention
July 14, 2021	Updated EBS iLink 3 Sample Messages with HEX samples
June 30, 2021	Added Maximum Order Size section.
June 17, 2021	Added note to Self Match prevention section.
June 2, 2021	Added EBS Price Discretion Scenarios page.
June 1, 2021	Added Order Entry Service Gateway section.
April 19, 2021	Added EBS Reject Codes page
April 5, 2021	Added Cancel on Conclusion section.
April 21, 2021	Added EBS iLink 3 Sample Messages
April 16, 2021	Added EBS Messages
March 24, 2021	Added Latency Floor section.
February 24, 2021	Updated Minimum Quote Life section and added note.
February 11, 2021	"MiFID Tag Validation" - Added second note about tag 5290-Executor and tag 36023-IDMShortcode.
February 10, 2021	Updated Market Segment section. Added Minimum Quote Life section.
January 22, 2021	Updated iLink 3 EBS Message Changes Table with: Add two new enum value to support Minimum Quote Life (MQL): <ul style="list-style-type: none"> • Pending Cancel (6) • Pending Replace (E)
December 4, 2020	<ul style="list-style-type: none"> • "Market Segment" - Added Market Segment IDs for EBS FX Spot and Metals and EBS FX Spot and NDFs • "MiFID Tag Validation" - Added note regarding pre-registered Order Cancel - Execution Report.
December 3, 2020	Initial publication

This page will be updated periodically as additional information regarding EBS becomes available. Please watch the Revision History, EBS, and CME Globex Notices for notification of new information.

Key Customer Events and Dates

In preparing to trade EBS products on CME Globex, customers must be aware of the following implementation milestones.

See the full [New Release and Production launch schedule](#).

Testing and Certification

Client systems must certify to iLink, MDP 3, and complete EBS-specific tests before being able to trade EBS products. EBS is available for testing and certification in the New Release environment. Customers not already connected to the New Release environment will require a new iLink 3 session ID to connect to CME Globex. The Certification environment will become available for EBS products concurrent with production.

Future Topics

Additional information on the following topics will be available soon:

- Settlement Counterparty Visibility

Getting Started with iLink 3 Order Entry

This section provides an overview of current iLink 3 that will be used for EBS Market including eFix Matching on CME Globex. If you are new to iLink 3 or wish to better understand how your current system aligns with upcoming EBS functionality, CME Group recommends starting here.

Service	Description
iLink 3	Order entry and management service

Market Access

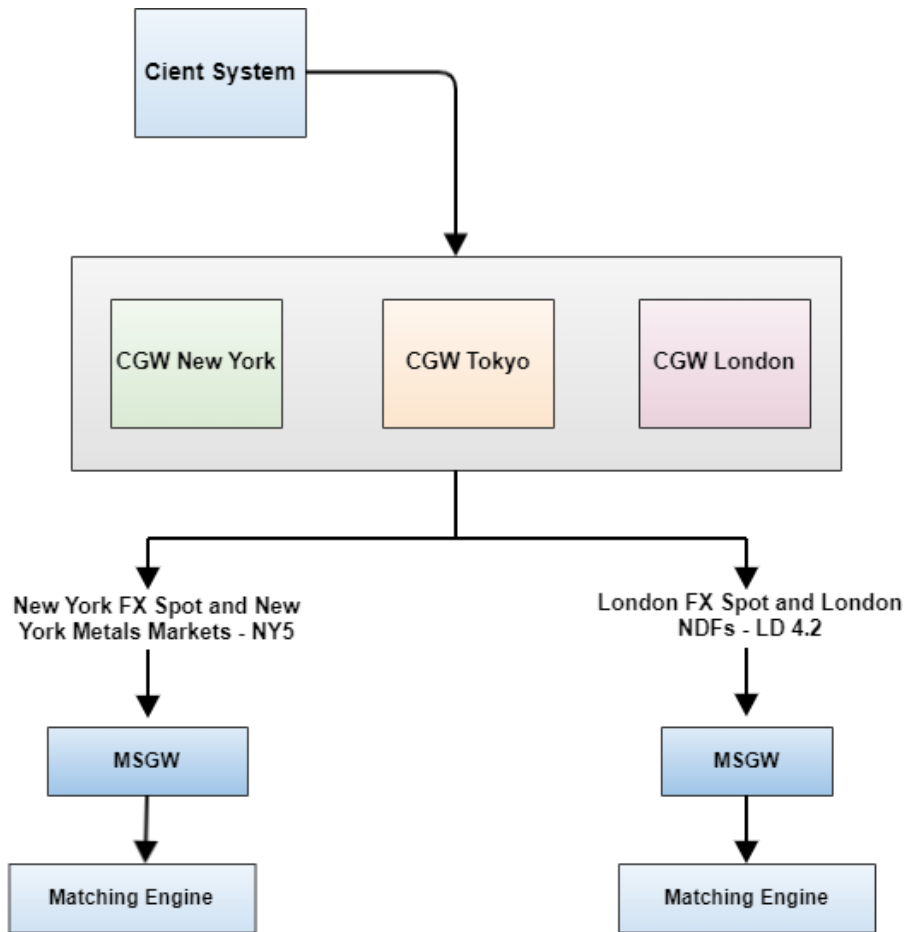
EBS Market on CME Globex will be available through iLink 3 Binary Order Entry on dedicated [Market Segment Gateways \(MSGWs\)](#) and [Convenience Gateways \(CGWs\)](#). Customers can choose to access EBS Market through the MSGWs directly, or the CGWs, which will route customer orders to the appropriate MSGWs.

For an order submitted over an iLink Convenience Gateway, that order will be routed to the dedicated Market Segment Gateway to the CME Globex matching engine supporting the given instrument.

Order for EBS Market products can also be submitted over the Market Segment Gateway directly to the matching engine supporting the given instrument.

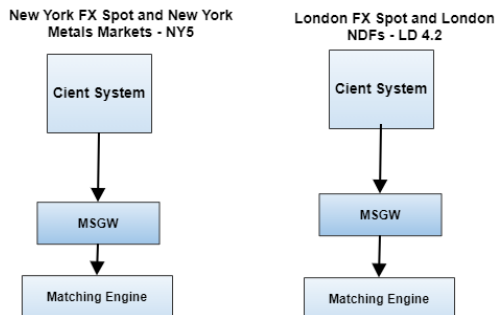
Convenience Gateway

- The CGW provides a single point of order entry for all EBS Market instruments regardless of matching region.
- All orders are routed to the MSGW in the matching region.



Market Segment Gateway

- Provides the fastest route for order entry for instruments in the local region over a dedicated MSGW.
- Orders are not routed to the matching engine. An order submitted for an instrument not matched locally will be rejected.



EBS Market will trade on one of the two distinct regions. Each product is available for trading in a single location.

Products	Primary Region	Backup Region	MSGW	CGW
New York Spot	Equinix Secaucus NY5	Equinix Slough LD4.2	✓	✓
New York Metals				
London Spot	Equinix Slough LD4.2	Equinix Secaucus NY5	✓	✓
London NDFs				

N/A	Tokyo TY3	N/A		
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The MSGWs and CGWs will be physically located in the Primary Region for production and the Backup Region for Disaster Recovery.

- The New York and London regions will each support both MSGW and CGW, while the Tokyo location will only support CGW
- The New York and London CGWs will route orders to either New York or London
- The Tokyo CGW will route orders to either New York or London

Both EBS CGW and MSGW sessions will use [iLink 3](#) messaging protocol.

EBS Market

EBS Market includes Central Limit Order Book (CLOB) and eFix Matching.

Trading Type	Products	Market Structure	Order Entry APIs
EBS Market CLOB	New York FX Spot New York Metals London FX Spot London NDFs	Market by Price Central Limit Order Book	iLink 3
eFix Matching	New York FX Spot London FX Spot	Time based, quantity matching pool of anonymous benchmark liquidity. Bilateral matching ahead of a benchmarks calculation, with the given rate being applied post publication. No public market data for order book and trade.	iLink 3

Market Segment

New Market Segment IDs for EBS Market will be added in tag 1300-MarketSegmentID in the [MDP 3 - Security Definition](#) (tag 35-MsgType=d) message.

Market Segment ID	Market Segment Description	Product
36	EBS FX Spot and Metals	New York FX Spot New York Metals
38	EBS FX Spot and NDFs	London FX Spot London NDFs

Order Entry Service Gateway

The [Order Entry Service Gateway](#) (OESGW) is the means for customers to register administrative information.

OESGW market segment semantics are:

<marketsegment id="8" label="EBS CGW Order Entry Service Gateway">

<marketsegment id="18" label="EBS NY Order Entry Service Gateway">

<marketsegment id="20" label="EBS London Order Entry Service Gateway">

- If the EBS customer opts for on-demand administrative information to MSGW, they do not need to support OESGW.
- If the EBS customer opts to pre-register their administrative information, they **MUST** use the same iLink 3 session to connect to the Service Gateway using FIXP protocol, and submit Party Details Definition Request messages as follows:
 - For CGW session, use OESGW "8" to pre-register for all EBSM and eFIX markets
 - For MSGW session,
 - Use OESGW "18" for "New York FX Spot and New York Metals"
 - Use OESGW "20" for "London FX Spot and London NDFs"

Market Data Exchange Identifier

To help identify the EBS products on CME Globex, the following Exchange code identifiers will be added to tag 207-SecurityExchange in the [MDP 3 - Security Definition](#) (tag 35-MsgType=d) message.

Products	tag 207-SecurityExchange
New York Spot	EBSC
New York Metals	EBSC
London Spot	EBSC
OFF SEF/OFF MTF	EBSC
ON SEF/ON MTF	NEXS

Product-Specific Features

This section describes the iLink 3 enhancements for EBS products. Current CME Group and EBS customers developing applications to trade EBS products on the CME Globex platform must be aware of the EBS features described below.

Notional Quantity

FX markets are usually quoted and market data disseminated in Notional terms.

- In all Execution Report - Fill messages the notional values will be calculated as follows:
 - Base Currency Notional (tag 381) = LastQty (tag 32)
 - Counter Currency Notional (tag 1056) = LastQty (tag 32) x LastPx (tag 31)
 - Contra Base Currency Notional (tag 5542) = OrderEventQty (tag 1800)
 - Contra Counter Currency Notional (tag 5971) = OrderEventQty (tag 1800) x OrderEventPrice (tag 1799)
- All of these tags in the New Order Single and Order Cancel Replace Request messages will now contain notional values instead of lot size:

Tag
<ul style="list-style-type: none"> tag 38-OrderQty tag 110-MinQty tag 1138-DisplayQty

- All of these tags in the following Execution Report messages will contain notional values instead of lot size:

Tag	Execution Report Message
tag 38-OrderQty	Execution Report Reject
tag 110-MinQty	Execution Report New
tag 1138-DisplayQty	Execution Report Modify
tag 14-CumQty	Execution Report Pending Replace
tag 151-LeavesQty	Execution Report Cancel
tag 32-LastQty	Execution Report Pending Cancel
	Execution Report Elimination
	Execution Report Trade Outright

The following new fields have been added to the Execution Report Trade Outright - Fill message to support Spot FX and NDFs:

- GrossTradeAmt (tag 381) – Notional in base currency
- CalculatedCcyLastQty (tag 1056) – Notional in counter currency
- ContraGrossTradeAmt (tag 5542) in NoOrderEvents (tag 1795) repeating group
- ContraCalculatedCcyLastQty (tag 5971) in NoOrderEvents (tag 1795) repeating group

New tags added to support notional amounts:

Tag	Field Name	Binary Type	Binary Length	Required	Value	Description
381	GrossTradeAmt	Decimal64NULL	9	N		Total amount traded (in notional) in base currency for the Spot
1056	CalculatedCcyLastQty	Decimal64NULL	9	N		Total amount traded (in notional) in counter currency for the Spot

New tags for notional amounts added to the NoOrderEvents (tag 1795) repeating group:

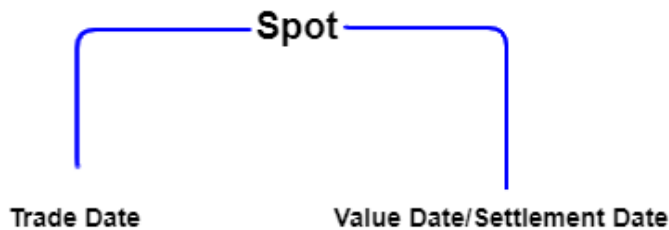
Tag	Field Name	Binary Type	Binary Length	Required	Value	Description
5542	ContraGrossTradeAmt	Decimal64NU LL	9	N		Amount traded (in notional) in base currency for the Spot with this counterparty
5971	ContraCalculatedCcyLas tQty	Decimal64NU LL	9	N		Amount traded (in notional) in counter currency for the Spot with this counterparty

Value Date

The following new tags will be added to the Execution Report Trade Outright - Fill message to support Spot FX and NDFs:

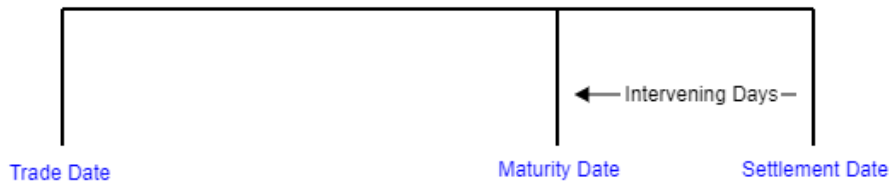
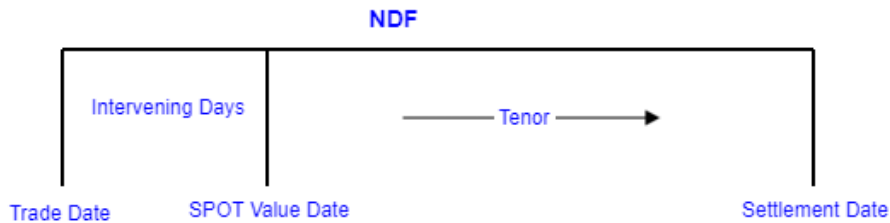
- SettlementDate (tag 64) – Value date
- MaturityDate (tag 541)- Date of maturity

For Spot products, Intervening days = number of business days to value date. (Example: If value date is T+2 then intervening days = 2)



$$\text{Value Date/Settlement Date} = \text{Trade Date} + \text{Intervening Days}$$

For NDFs, **maturity occurs on the fixing date**. The tenor must be added to the Spot value date to determine the Settlement Date.



$$\begin{aligned} \text{SPOT Value Date} &= \text{Trade Date} + \text{Intervening Days} \\ \text{NDF Settlement Date} &= \text{SPOT Value Date} + \text{NDF Tenor} \\ \text{NDF Maturity Date} &= \text{Settlement Date} - \text{Intervening Days} \end{aligned}$$

New Date tags for Spot FX and NDF trades:

Tag	Field Name	Binary Type	Binary Length	Required	Value	Description
64	SettlementDate	LocalMktDate	2	N		Specific date of trade settlement
541	MaturityDate	LocalMktDate	2	N		Fixing date

EBS Market Order Entry

This section describes iLink 3 functionality for EBS Market.

Supported Order Types & Order Qualifiers

The table summarizes the supported order types and qualifiers for EBS Market on CME Globex:

EBS Market Summary	Description	Available Combinations
Order Types (tag 40-OrdType)	Limit	Limit + GFS Limit + GFS + Display Quantity*
Duration Qualifiers (tag 59-TimeInForce)	Good for Session (GFS) FOK FAK	Limit + GFS + PD Limit + GFS + Display Quantity* + PD Limit + FOK
Quantity Qualifiers (tag 1138-DisplayQuantity)	Display Quantity*	Limit + FAK
Price Qualifiers (tag 845-DiscretionPrice)	Price Discretion (PD)	

*on CME Globex an *iceberg* order is referred to as a Display Quantity order

Good for Session

With this release, the Good for Session (GFS) order qualifier is supported for all EBS instruments. If GFS orders (tag 59-TimeInForce=99) are submitted to CME Globex, **these orders will expire at the next instrument Close.**

EBS instruments on CME Globex close either daily or weekly.

- Daily close
 - All eFix instruments (at fixing close, shortly before each fixing time)
 - Rolling Dated ON SEF/ON MTF NDFs
 - All fixed month NDFs, both OFF SEF/OFF MTF and ON SEF/ON MTF
- Weekly close
 - Spot FX
 - Spot Metals
 - Rolling Dated OFF SEF/OFF MTF NDFs



- Notification of [trade date roll](#) will be provided on the EBS Market Data channels both screened and unscreened.
- GFS orders are cancelled when market is closed manually by GCC.
- GFS orders are cancelled when there is technical pause.
- GFS order are cancelled upon a Cancel on Conclusion(COC) and Cancel on Disconnect (COD) event.

A new value will be added to TimeInforce (tag 59) to support GFS orders:

Tag	Field Name	Binary Type	Binary Length	Required	Value	Description
59	TimeInForce	TimeInForce	1	Y	TimeInForce=0 (Day) TimeInForce=1 (GTC) TimeInForce=3 (FAK) TimeInForce=4 (FOK) TimeInForce=6 (GTD) TimeInForce=99 (GFS)	Specifies how long the order remains in effect FOK is only for BrokerTec and EBS GFS is only for EBS



Good 'till Cancelled (GTC)/Good 'till Date (GTD) and Day orders will not be supported for EBS instruments. Orders submitted with this qualifier will be rejected.

Display Quantity Order

Note: on CME Globex an *iceberg* order is referred to as a Display Quantity order.

EBS Display Quantity orders will utilize tag 1138-DisplayQty to control the portion of the order's quantity that is displayed to the market. The display quantity is the quantity shown to the market as specified by the customer, gradually exposing the remaining quantity until the entire order quantity is depleted.

For EBS Market, a resting display quantity order (tag 1138-DisplayQuantity >0) cannot be modified to a non-display quantity (tag 1138-DisplayQuantity=0), and vice versa.

Price Discretion Order

Price Discretion (PD) allows an order to rest and automatically improve its Limit price for matching opportunity while maintaining a given visible Limit price. For examples please see [EBS Price Discretion Scenarios](#).

A new field has been added the following messages to support Price Discretion:

- New Order Single
- Order Cancel Replace Request
- Execution Report New
- Execution Report Reject
- Execution Report Modify
- Execution Report Cancel
- Execution Report Elimination
- Execution Report Trade Outright
- Execution Report Status

New tag will be added to support Price Discretion orders:

Tag	Field Name	Binary Type	Binary Length	Required	Value	Description
845	Discretion Price	PRICENU LL9	8	N		The presence of DiscretionPrice on an order indicates that the trader wishes to display one price but will accept trades at another price Applicable only for EBS

Maximum Order Size

With this launch EBS customers will have the ability to configure maximum order size for each product code across multiple Globex User Signatures (GUS) within the same Globex Firm ID (GFID) in the [CME Customer Center](#).



For New Release testing, please contact your [Global Account Manager](#) to configure maximum order size for each GUS, GFID, and product code combination on your behalf.

Orders with a tag 38-Order Quantity value greater than the maximum order size will be rejected. CME Globex will send a Business Reject (tag 35-MsgType=j) message with including tag 380-BusinessRejectReason = **139** and tag 58-Text = **Max Order Size Violation Trader: '<Sender Sub ID>', Order Quantity: <order quantity>breaches Max Order Size Limit: <max quantity>for Product Code: <Product Code>**.

Maximum order size functionality is optional. If the maximum order size is not configured for a GUS, the default maximum order size sent in tag 1140-MaxTradeVol from the Security Definition (tag 35-MsgType=d) message will apply.

The maximum order size will be enforced for the following message types:

- New Order Single (35=D)
- Order Cancel Replace Request (35-G)
- Request for Quote (35=R)

This feature only applies to EBS Market and eFix Matching Service instruments.

Order Cancel and Cancel/Replace Requests by ClOrdID

EBS supports cancellation and modification of orders by ClOrdID (tag 11). EBS customers can cancel and/or modify their orders without providing an OrderID (tag 37).

ClOrdID (tag 11) Uniqueness

To support order cancellation and order modification by tag 11-ClOrdID, this value **must** be unique per SenderComp (Session ID + Firm ID) on the same market segment when submitting a new order.

For a New Order tag 11-ClOrdID:

- CME Globex will reject an order having the same ClOrdID and SenderComp as a currently working order on the given market segment.

For a Cancel/Replace tag 11-ClOrdID:

- **CME strongly recommends that clients do not change the ClOrdID value on a working order, as Minimum Quote Life (MQL) can cause unexpected results.**
 - **Example:** A resting order can match during a Cancel/Replace MQL "pending" state, and the client will receive a fill for the original Client Order ID.

OrderID (tag 37)

Order ID is an optional tag in Order Cancel and Order Cancel/Replace Request messages for EBS orders.

- If Order Cancel Replace Request or Order Cancel Request contains both ClOrdID and OrderID, Order ID will be used to lookup the original order.
- If ClOrdID in Order Cancel/Replace Request or Order Cancel Request is changed from what was in original order,
 - customer should send Order Cancel/Replace or Order Cancel Request with the latest ClOrdID accepted by CME Globex.
 - customer sending Order Cancel/Replace or Order Cancel Request with the previous ClOrdID must provide OrderID as well; otherwise, Order Cancel/Replace will be rejected.
- Execution Report Cancel and Execution Report Modify will return both ClOrdID and OrderID values.
- Order Cancel Replace Reject and Order Cancel Reject will return both ClOrdID and OrderID.



CME Future and Options and BrokerTec Markets do not support cancellation and modification of orders by ClOrdID (tag 11).

MSGW Safeguards

iLink 3 - EBS on MSGW will support the [CME Globex MSGW Safeguards](#), including tag 9553-SplitMsg and tag 7552-DelayToTime. With MSGW Enhancements, a Market Segment Gateway (MSGW) iLink 3 EBS session sends a network packet with an incomplete message, that session will be subject to additional processing to ensure the stability of the platform. This processing results in at least 3 microseconds before the message(s) can be sent to the match engine.



Convenience Gateway (CGW) iLink3 EBS sessions will not support MSGW Safeguards

With this launch, CME Globex will enforce the MSGW Safeguards to split inbound iLink messages on a MSGW connection that is routed to the same trading region:

- London MSGW routing to London Region
- NY MSGW routing to NY Region

CME Globex will not enforce the MSGW Safeguards to split inbound iLink messages on a CGW connection:

- Tokyo CGW routing to London and NY Regions
- London CGW routing to London and NY Regions
- NY CGW routing to the NY and London Regions

For full details, please review the [CME Globex Market Segment Gateway Safeguards](#).

Self Match Prevention

EBS on CME Globex supports standard Self-Match Prevention (SMP), including tag 2362-SelfMatchPreventionID, with Locked Markets.

In the event that two orders from the same SMP ID would match, the arriving order will "trade around" any resting order(s) with the same SMP ID.

- If arriving order is a Good For Session order, and does not fully trade, the remaining quantity will rest on the book at the same price level as the resting order(s). Market data will reflect the crossed book.
- Clients can configure as many Self-Match Prevention IDs as desired. SMP IDs may be shared across GFIDs only if the GFIDs are part of the same Institutional Group.
- Tag 8000-SelfMatchPreventionInstruction are not supported for EBS SMP.
 - if populated on EBS orders, CME Globex will ignore the value in tag 8000.



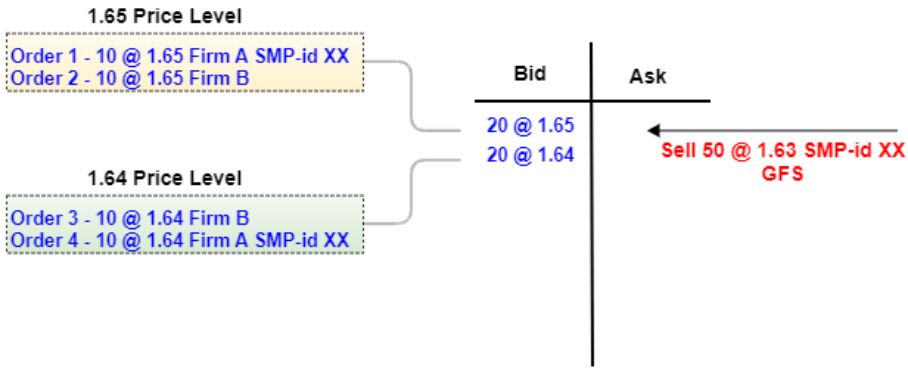
- Newly registered SMP IDs will be available after 1630 CT/1730 ET daily.
- SMP IDs deleted from FADB throughout the week will be removed from the trading system every Friday night, after the close.

For complete details, please see the [CME Globex Self-Match Prevention](#) topic.

Example 1 - SMP with GFS (Good for Session)

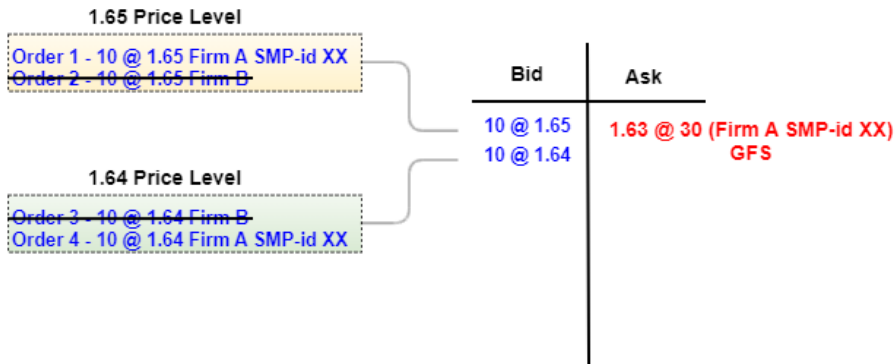
Starting Book

- Firm A submits Sell 50 @ 1.63 SMP_id XX GFS



End Book

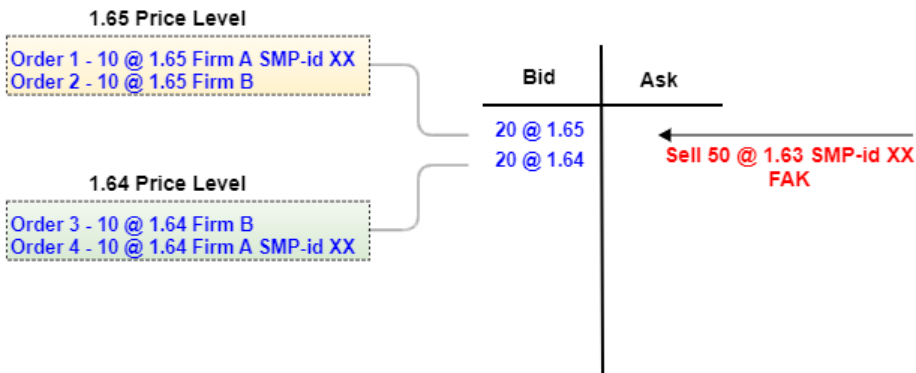
- The incoming sell order trades with Order 2 and Order 3. Order 1, Order 4, and the remaining sell order quantity rests on the crossed book.



Example 2 - SMP with Aggressor FAK

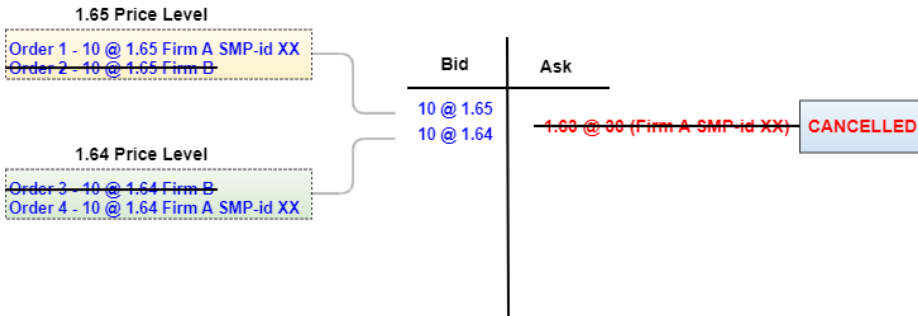
Starting Book

- Firm A submits Sell 50 @ 1.63 SMP_id XX FAK



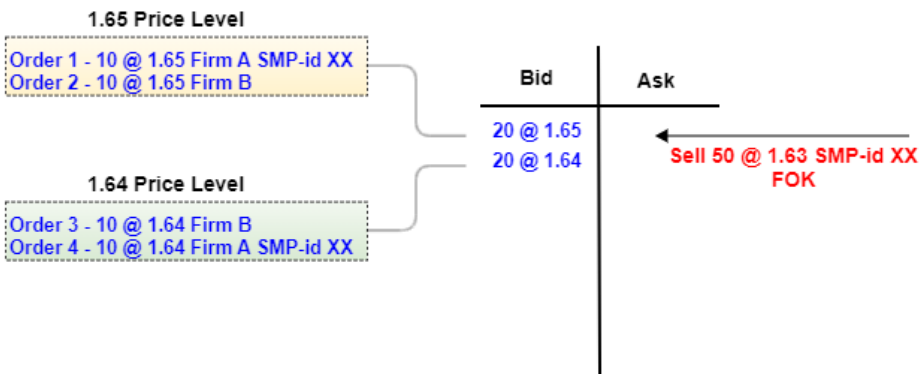
End Book

- The incoming sell order trades with Order 2 and Order 3. Order 1 and Order 4 rest on the book and the remaining Sell quantity is cancelled.



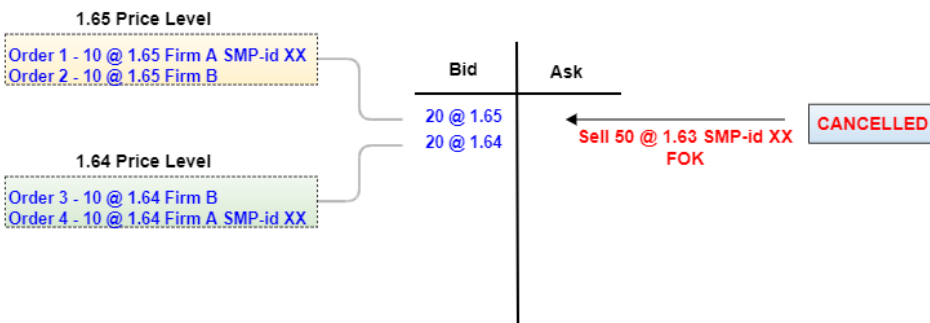
Example 3 - SMP with Aggressor FOK

- Firm A submits Sell 50 @ 1.63 SMP_id XX FOK



End Book

- No trades, the incoming sell order is cancelled



EBS MiFID Short Code Identifiers on CME Globex

With this launch, each GFID is associated with multiple GUS, and each GUS will have his or her own associated short code. They will need to identify them as the Financial Decision Maker and/or the Executing Decision Maker, on each of their orders.



- Only one Natural Person short code can be associated with a given GUS. If required, additional person short codes may be registered using a separate GUS for each. For a natural person GUS with access to the Order Book may only be used by that natural person and may not be used by any other natural person or entity and may not be used as the GUS for orders entered by an Automated Trading System.
- For algorithms, you can register one or more short codes against a GFID and GUS.

For CME Globex requirements on Natural Person and Automated Trading System (ATS) short code and Operator Id (GUS) usage, please refer to the links below:

[Redline of Rules - 208, 202 and 309](#)

[MRAN - CME Globex OperatorID Requirements](#)

This table lists all the relevant fields that will be used on each order message to associate short codes with GFID or GUS.

iLink 3 Tag	Tag Name	Tag Value
Tag 1691 when PartyDetailRole = Executing Firm	PartyDetailID	Globex Firm ID (GFID)
Tag 5392	SenderID	Globex User Signature (GUS)
Tag 5290	Executor	Short code for the person or algo that submitted the message
Tag 36023	IDMShortCode	Investment Decision Maker Short Code

The **Party Details Definition Request message** (tag 35-MsgType=CX) defines all customer administrative information, including the MiFIDshort code. iLink 3 allows customers to pre-register the party details, or send a Party Details Definition Request message *directly preceding* each order message (on-demand). Overview of on-demand and pre-register administrative information is available in the [Party Details Definition Messaging](#).

The following MiFID tags are required for On-SEF/On-MTF FX NDFs products:

Short Code	iLink 3 Tag	Description
Executing Decision Maker of New Order Single	tag 5290-Executor	Will be populated with the MiFID short code for person or algo that submitted the message. The short code will be mapped to National ID or Algo at reporting time Note: Participants on NEX SEF are required to self-certify that their algorithms will avoid contributing to or creating disorderly trading conditions. This algo self-certification is available via the Request Center in the CME Customer Center .
Investment Decision Maker of New Order Single	tag 36023-IDMShort Code	Will be populated with the MiFID Short Code of the Investment Decision Maker.

MiFID Tag Validation

Executor – Tag 5290 and IDMShortCode – Tag 36023

The values of tag 5290-Executor and tag 36023-IDMShortcode for EBS Market on CME Globex must be numeric only. Customers using alphanumeric short codes must re-register on the [NEX Upload Facility](#) (NUF) with numeric short codes. Any EBS orders with alphanumeric short codes will be rejected on CME Globex.

CME Globex will validate MiFID tags 5290-Executor and tag 36023-IDMShortcode for presence and correct registration for all iLink 3 EBS application messages, except Order Cancel message.

For Order Cancel

Tag 5290 and tag 36023 will be accepted and acknowledged if sent on Order Cancel messages. If not populated, the cancel message will be accepted and acknowledged with the value as follows:

Tag 5290 and/or Tag 36023	Expected Behavior	Acknowledge Value
Not Present	Accept	Value from the resting order

Present with an unregistered value	Reject	N/A
Present with a registered value	Accept	Value from Cancel message

The short codes are part of the Party Details Definition message. Pre-registered Order Cancel - Execution Report, tag 1505-PartyDetailsListRequestID will contain the value of tag 1505 from the original order submission.

If the pre-registered cancel request contains different tag 1505-PartyDetailsListRequestID, the short code may not match with tag 1505-PartyDetailsListRequestID from the cancel acknowledgement. In this case, customers must be aware the cancel is accepted and acknowledged with the value from cancel request.

For example, given that PartyDetailID 1 and PartyDetailID 2 belong to the same session and firm:

- PartyDetailID 1 with executor EXEC1 and IDMSHORTCODE IDM1
- PartyDetailID 2 with executor EXEC2 and IDMSHORTCODE IDM2

If customer submits new order with PartyDetailID = 1, and cancel this same order with PartyDetailID = 2, CME Globex will return PartyDetailID = 1 on the cancel acknowledgement.

Messages missing the tags or containing an unregistered value will be rejected with:

- Business Reject message with tag 380=5 (required field missing) and
 - Tag 58=Tag 5290 (Executor) required field missing'
 - Tag 58=Tag 36023 (IDMSHORTCODE) required field missing'
 - Tag 58=Tag 5290 (Executor) not registered'
 - Tag 58=Tag 36023 (IDMSHORTCODE) not registered'

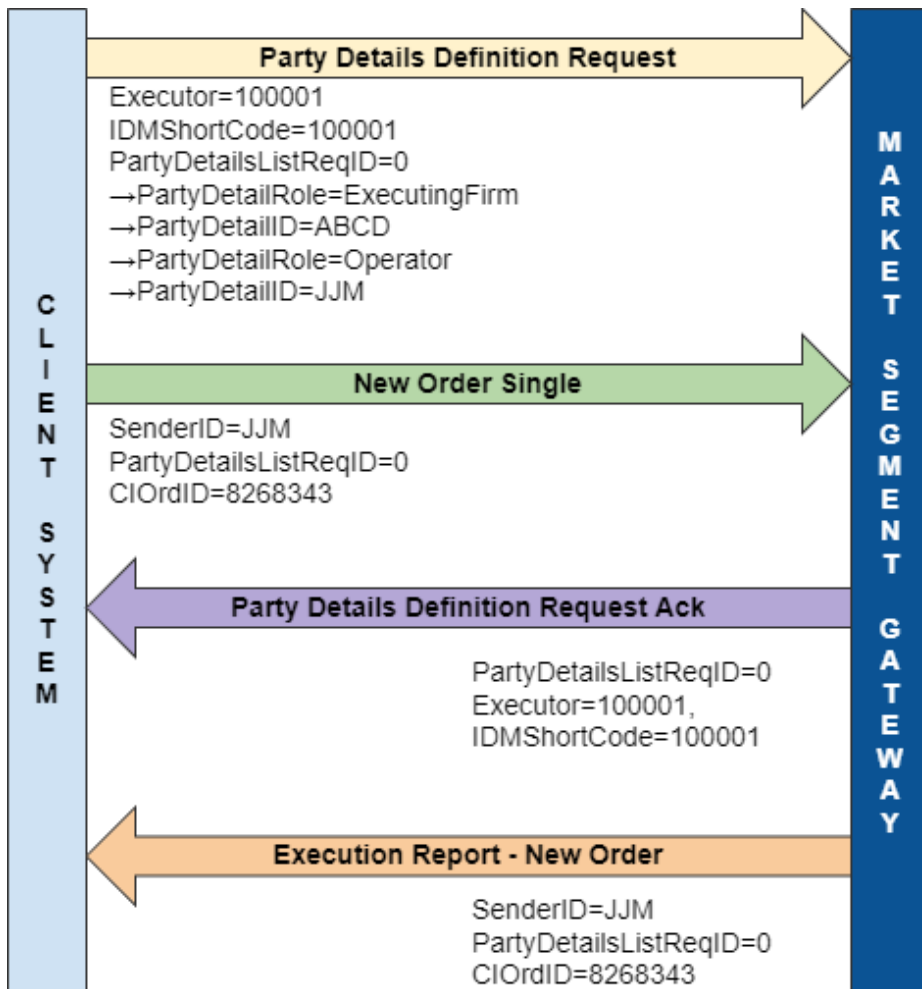
To facilitate client development and certification, in New Release the presence of these tags will be validated but the values are not required to be registered.

On-Demand MiFID Short Code Scenarios

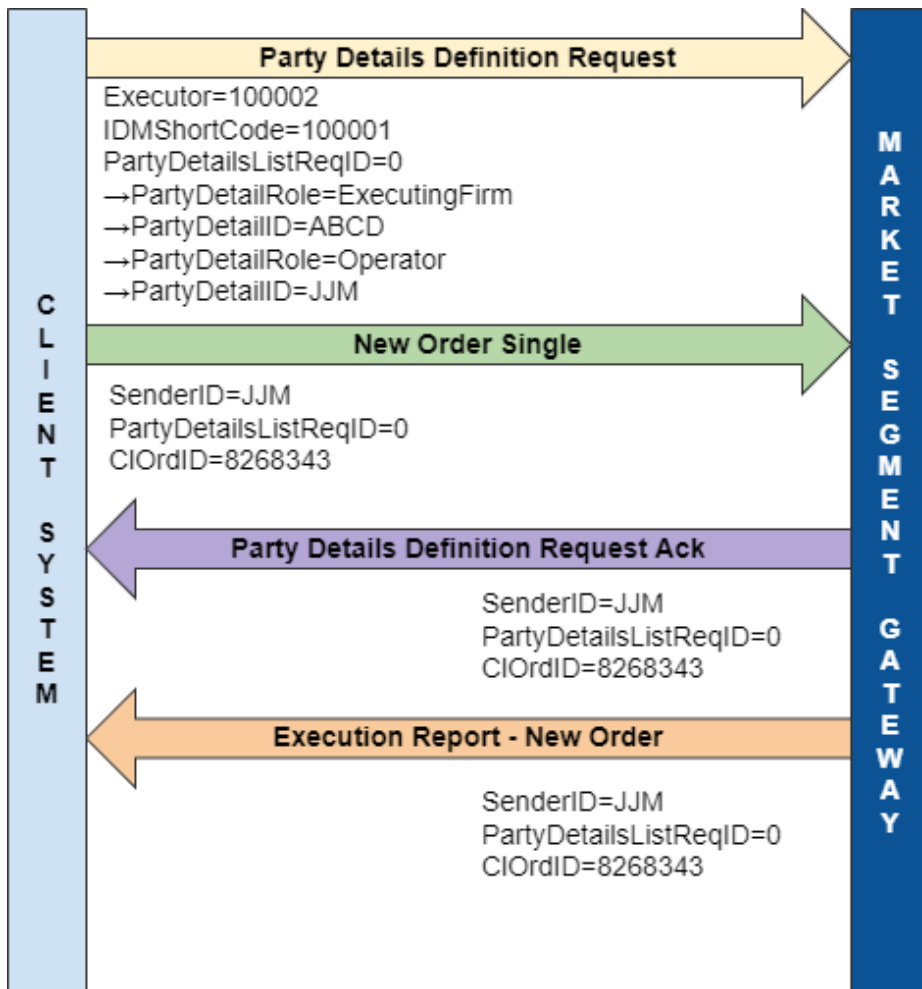
For non-pre-registered clients, they will send a Party Details Definition Request message *directly preceding* each order message shown in the following scenarios.

Associated Short Code with GFID or GUS	Description	EBS ShortCode
GUS - JJM	Natural Person	100001
GFID - ABCD	NDF Algo	100002

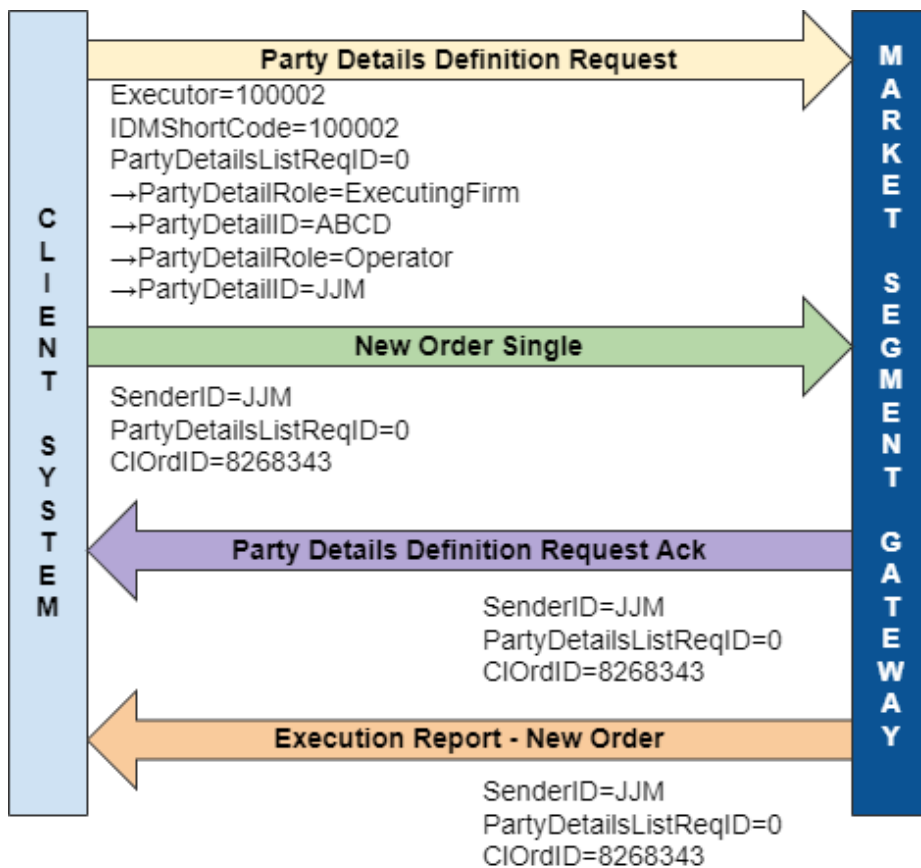
Scenario 1 – Natural Person is the Financial Decision Maker and Executing Decision Maker



Scenario 2 – Natural Person is the Financial Decision Maker and Algo Executing Decision Maker



Scenario 3 – Algo is the Financial Decision Maker and Algo Executing Decision Maker



LiquidityProvision – Tag 9373

EBS on CME Globex will support reporting of the liquidity provision indicator. Tag 9373 is added to the following Application messages.

- New Order Single
- Order Cancel Replace Request
- Order Cancel Request
- Order Cancel Replace Reject
- Order Cancel Reject
- Execution Report - Reject
- Execution Report - New
- Execution Report - Modify
- Execution Report – Cancel
- Execution Report – Elimination
- Execution Report - Status
- Execution Report - Trade Outright
- Execution Report - Trade Spread
- Execution Report - Trade Addendum Outright
- Execution Report - Trade Addendum Spread

Tag	Field Name	Binary Type	Binary Length	Req	Description
5290	Executor	uint64N ULL	8	N	Will be populated with the MIFID short code for the person or algo that submitted the message. The short code will be mapped to National ID or Algo at reporting time. Conditionally required for EU BrokerTec and EBS MiFID regulated instruments. Messages missing this tag or containing an unregistered value will be rejected
36023	IDMShortCode	uint64N ULL	8	N	Represents the Investment Decision Maker Short Code Conditionally required for EU BrokerTec and EBS MiFID regulated instruments. Messages missing this tag or containing an unregistered value will be rejected

9373	LiquidityProvision	Boolean NULL	1	N	Field added to capture if an order was submitted for market making obligation or not Applicable only for EU BrokerTec and EBS MiFID regulated instruments.
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The following MiFID tags are not supported in EBS Market:

- ShortSaleType – Tag 5409
- NoTrdRegPublications – Tag 2668
 - TrdRegPublicationType – Tag 2669
 - TrdRegPublicationReason – Tag 2670

EBS Counterparty Dissemination

With this launch, EBS customers can identify a counterparty of each trade on the [iLink 3 Execution Reports -Trade Outright](#).

- Counterparty Deal Code
 - OrderEventText (tag 1802) of the NoOrderEvents (tag 1795) repeating group will be populated with the Settlement Counterparty Public ID for EBS Market.
- Counterparty Trader ID
 - Globex User Signature (GUS) will **not** be provided on iLink 3 Execution Reports and CPT Trade Capture Reports.

More details are available on [EBS Central Post Trade \(CPT\) FIX API - CME Group Integration](#).

Minimum Quote Life

Minimum Quote Life (MQL) is designed to increase the likelihood of a viewed quote being available to trade and reduce hyper-active order book participation by implementing a minimum time limit before an order may be modified or cancelled. With MQL, a new order must rest for a pre-defined duration ("MQL timer") before it can be cancelled or modified. The length of time is defined for each eligible product individually and communicated via the MDP 3 Security Definition, and Reference Data API v2.



Customers can use tag 60-TransactTime on the [Execution Report - New Order](#) or [Modify](#) message to determine when the MQL timer started.

- If the MQL timer has expired, then the order can be cancelled or modified immediately and book updates will be reported on market data
- If the MQL timer has not expired:
 - CME Globex will queue any order cancels and acknowledge a cancel request with a [iLink 3 Execution Report Pending Cancel](#) (tag 39=6 and tag 150=6), and cancel the order at the end of the MQL time limit.
 - CME Globex will queue any order modify requests and acknowledge the modify request with a [iLink 3 Execution Report Pending Replace Message](#) (tag 39=E and tag 150=E) and replace the order at the end of the MQL time limit.
 - Pending Execution Reports are not exposed on market data.
- A Pending Cancel Request is always prioritized over a Pending Cancel/Replace Request.
- Cancel on Disconnect (CoD) and Cancel on Conclusion (CoC) can supersede the MQL interval and cancel the resting order with tag 35-MsgType=8 & tag 39-OrdStatus=4 message including tag 378-ExecRestatementReason=100 to indicate CoD/CoC.
 - A Pending Cancel or Pending Cancel/Replace will be rejected with an Order Cancel Replace Reject (tag 35-MsgType=9) message including tag 102-CxlRejReason=2045 and tag 58-Text=<<This order is not in the book 'Order: XXX SenderCompID: XXX'>, once the MQL interval is over.

New Message Types

Execution Report Pending Cancel Message

The [Execution Report Pending Cancel](#) message is sent in response to an **Order Cancel Request** for an FX instrument subject to Minimum Quote Life to acknowledge the **cancel request** and to confirm the order will be cancelled at the end of the MQL time limit.

At the end of the MQL time limit CME Globex sends the **Execution Report Cancel message** to the client system confirming order cancellation.

If the client receives an **Order Cancel Reject**, the resting order on the book could not be cancelled at the end of the time limit. Depending upon the error reported, further action may or may not be required to resubmit the Order Cancel Request.

The **Execution Report Pending Cancel message** identifiers refer to the incoming Order Cancel Request message—not those from the resting order. Any Execution Report published *after* pending cancel but *before* cancellation will contain the identifiers from the original order.

Execution Report Pending Replace Message

The [Execution Report Pending Replace](#) message is sent in response to an **Order Cancel Replace Request** for an FX instrument subject to Minimum Quote Life to acknowledge the **cancel replace request** and to confirm the order will be replaced at the end of the MQL time limit.

At the end of the MQL time limit CME Globex sends the **Execution Report Cancel Replace message** to the client system confirming order replacement.

If the client receives an **Order Cancel Replace Reject**, the resting order on the book could not be replaced at the end of the time limit. Depending upon the error reported, further action may or may not be required to resubmit the Cancel Replace Request.

The **Execution Report Pending Cancel Replace message** identifiers refer to the incoming Order Cancel Replace message—not those from the resting order. Any Execution Report published *after* pending replace but *before* replacement will contain the identifiers and attributes (e.g. OrderQty, Price) from the original order.

Latency Floor

Latency Floor functionality is only applicable to EBS Market and all products listed on EBS Market utilize this functionality. The Latency Floor enables broader trading participation and moderates unwanted executions by prioritizing order cancel processing before aggressing order matching.

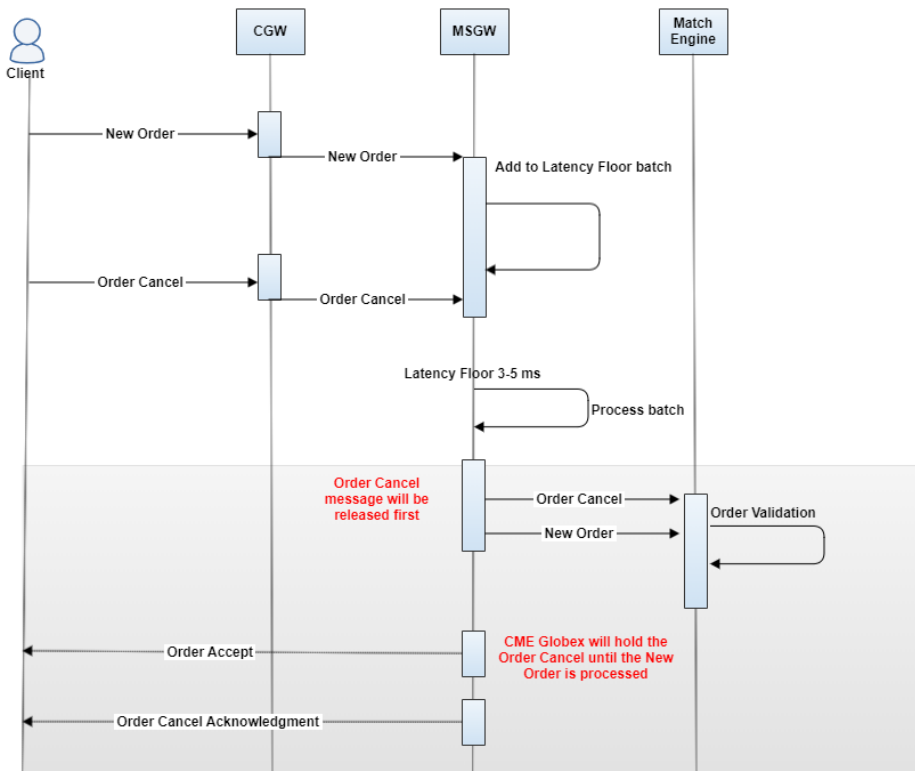
For a video overview see *Latency Floor: Batching Process* in the EBS Market Order Entry video.



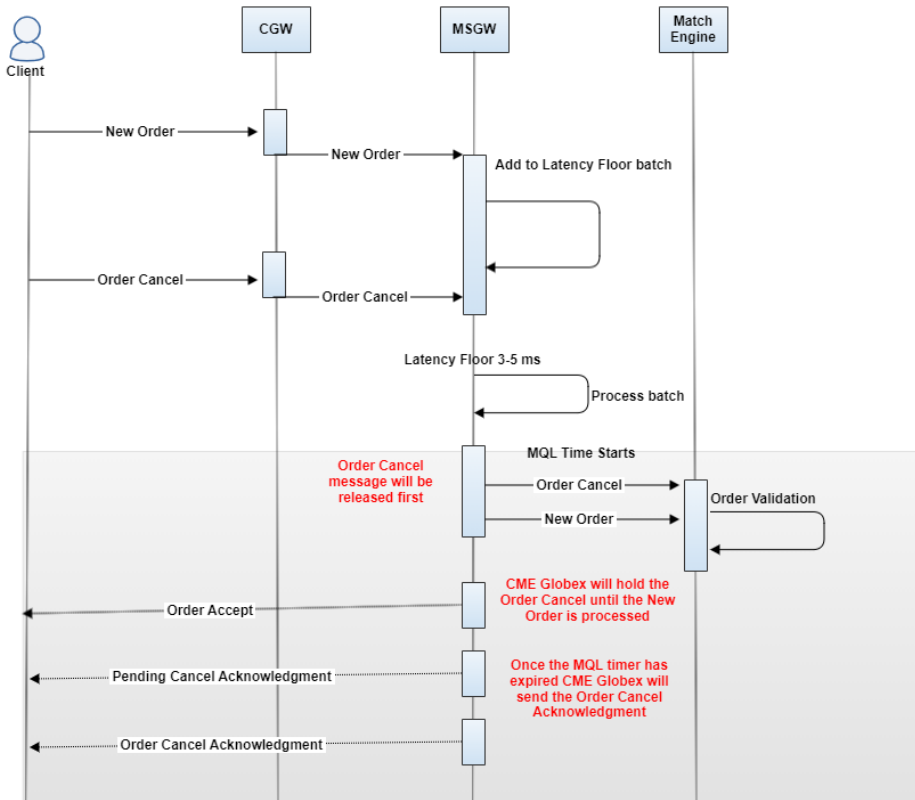
With Latency Floor, when an EBS Market order arrives to the MSGW, it is batched with any other orders that have arrived within the same batch window. Each order is assigned to an Institutional Group queue within the Latency Floor batch. The Institutional Group queues are released in random order. The orders within each queue are released in FIFO priority. All Order Cancel messages will be prioritized and released first, in FIFO priority before the institution rows are processed. All remaining orders are then released in a round-robin style (i.e. the first order from the first row is released, the first order from the second row is released, and so on for all rows, then the second order from the first row is released, the second order from the second row is released, and so on until all orders are released).

Latency Floor Examples

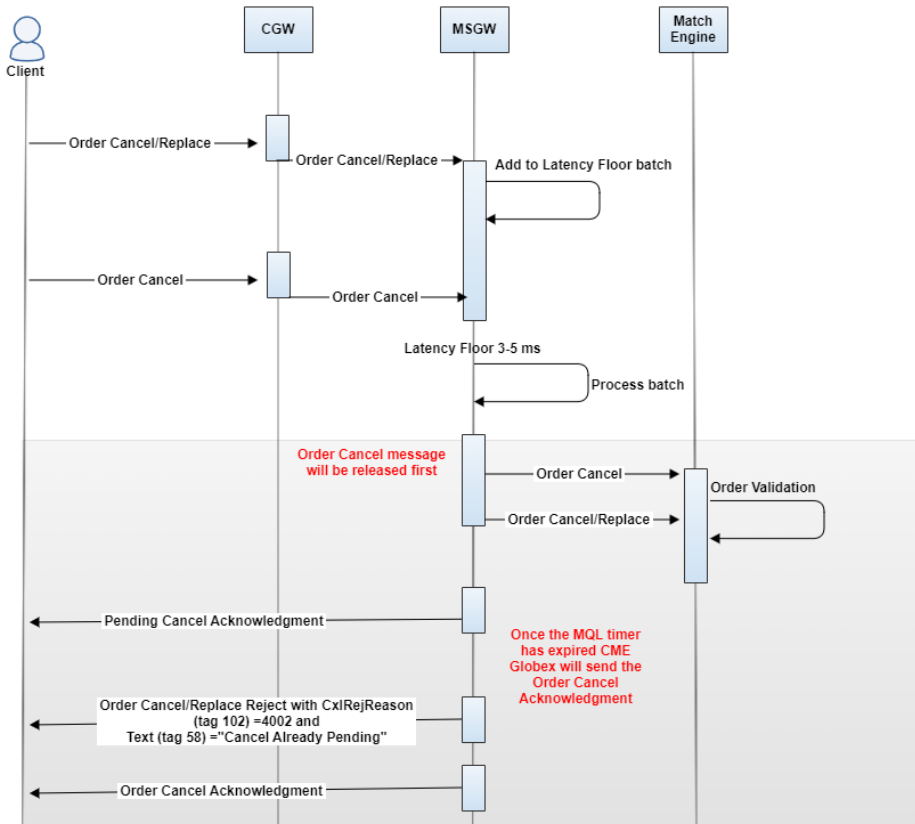
Scenario 1 - New Order and Order Cancel within the same Latency Floor (currency pair does not support MQL)



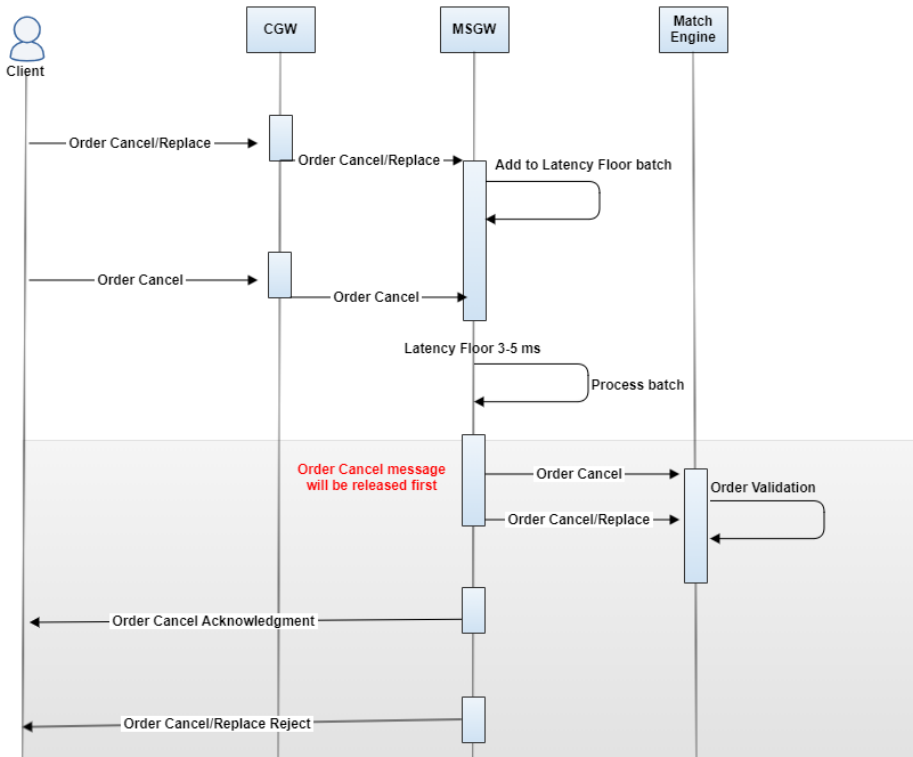
Scenario 2 - New Order and Order Cancel within the same Latency Floor (currency pair supports MQL)



Scenario 3 - Order Cancel Replace and Order Cancel within the same Latency Floor while resting order has MQL Protection



Scenario 4 - Order Cancel Replace and Order Cancel within the same Latency Floor while resting order has no MQL Protection



Product Aggregate

Multiple currency pairs (CCYs) can be aggregated to share the same Latency Floor (i.e. a single product or multiple products can share the same Latency Floor)

Latency Floor #1	Latency Floor #2	Latency Floor #3	Latency Floor #N
CCY Pair 1	CCY Pair 4	CCY Pair 9	CCY Pair XX
CCY Pair 2	CCY Pair 5	CCY Pair 10	
CCY Pair 3	CCY Pair 6		
	CCY Pair 7		
	CCY Pair 8		

iLink 3 Messaging Considerations

Latency Floor applies to the following iLink 3 messages:


- New Order Single
- Order Cancel Replace
- Order Cancel

Latency Floor does not apply to the following iLink 3 messages:

- Order Status Request
- Order Mass Status Request
- Request For Quote
- All FIXP session messages

There are no new FIX tags or messaging changes required to support Latency Floor. MSGW iLink 3 EBS customers can use tag 60-TransactTime and tag 7552-DelayToTime to determine when their message was received by CME Globex.

- **Tag 60-TransactTime** will represent the time when MSGW releases the message from the Latency Floor.
- **Tag 7552-DelayToTime** will now indicate the amount of time that a message was subject to additional processing as a result of Latency Floor.
 - Subtracting this number from tag 60-TransactTime will represent the original received time of in-flight message.

 CGW iLink3 EBS sessions will not support tag 7552-DelayToTime

eFix Matching

Orders for e-FIX instruments will be sent as a Good For Session (GFS) limit orders with price = 0 and executed at the fixing price with two Execution Report - Trade Outright messages having different ExecID (tag 17) values.

- The first Execution Report - Trade Outright will be sent with price = 0 and no counterparty indicates that the order is matched and the trade is for fixing price.
- The second Execution Report - Trade Outright will be sent after the Fixing price is published and assigned to the trade.


 Refer to the [EBS Reference Data API Migration](#) for fixing benchmarks and times.

eFix Matching instruments will be available for the same region as the underlying FX Spot instrument. Clients must send eFix Matching orders before the scheduled fixing time

After market close shortly before the scheduled fixing time, all unmatched eFix Matching orders will be eliminated by CME Globex.

This table summarizes the supported order types for eFix Matching instruments:

EBS Summary	Description	Available Combinations
Order Types(tag 40-OrdType)	Limit	Limit + GFS
Duration Qualifiers (tag 59-TimelnForce)	Good for Session (GFS)	Note - All other combinations will be rejected

 eFix Matching instruments do not support Latency Floor functionality.

eFix Matching Message Sequence

The following is an example eFix Matching order entry and trade messaging scenario.

Customer enters eFix Matching order with:

- Price (tag 44) = 0
- TimelnForce (tag 59)=GFS(99)
- OrderType (tag 40)=Limit Order (2)
- SecurityID (tag 48)=eFix Matching Instrument ID

If two customers submit an order for buy and sell, then the first Execution Report - Trade Outright will be published with:

- TradeType (tag 828)=1000 (Trade at Fixing Price)
- BenchmarkPrice (tag 6262) = null
- OrdStatus (tag 39) = 1(Partial Fill), 2 (Filled)
- GrossTradeAmt (tag 381) = Total amount traded (in notional) in base currency for the Spot
- ContraGrossTradeAmt (tag 5542) = Amount traded (in notional) in base currency for the Spot with this counterparty
- LeavesQuantity (tag 151) = quantity open for further execution
- CumQty (tag 14) = Total quantity filled
- no Counterparty details in OrderEventText (tag 1802) - this is because the ticket is not yet generated

After market close shortly before the scheduled fixing time, all unmatched eFix Matching orders will be eliminated, and the Execution Report - Elimination message is sent at order elimination.

Once the eFix Matching price is published, price adjustment is done for the given eFix Matching instrument, and the second Execution Report - Trade Outright is sent *with the fix price*:

- TradeType (tag 828)=1000 (Trade at Fixing price)
- BenchmarkPrice (tag 6262) for Fixing price
- OrderStatus = status of order from the original fill message
- GrossTradeAmt (tag 381) = Total amount traded (in notional) in base currency for the Spot
- ContraGrossTradeAmt (tag 5542) = Amount traded (in notional) in base currency for the Spot with this counterparty
- LeavesQuantity = quantity open for further execution
- CumQty (tag 14) = 0
- Counterparty details will be populated under OrderEventText (tag 1802)
- ExecRestatementReason (tag 378)=8 (Exchange)



The Trade Reinstatement i.e. second Execution Report - Trade Outright message will contain the same Order Status and Trade Identifiers as on the initial fill message as follows:

- Order Status (tag 39)
- LeaveQuantity (tag 151)
- SecExecID (Tag 527)
- MDTradeEntryID (Tag 37711)
- SideTradeID (Tag 1506)
- OrderEventExecID (tag 1797)
- OrderEventQty (tag 1800)

The following new tags have been added to Execution Report - Trade Outright and Execution Report - Trade Addendum Outright messages to support eFix Matching:

Tag	Field Name	Binary Type	Binary Length	Required	Value	Description
828	TradeType	ulnt16NULL	1	N	1000=Trade at Fixing	Represents a trade at fixing price
378	ExecRestatementReason	ExecReason	1	N	ExecRestatementReason=8 (Exchange)	Will be present when trade at fixing is assigned fixing price
6262	BenchmarkPrice	PRICENULL9	8	N		The price assigned to an eFix Matching which is determined by an automated set market mid-price from a third party market data feed. The Fixing Price will be distributed as soon as practicable after the Fixing Time

iLink 3 EBS Message Changes

The following table shows the tag level client system messaging impacts that must be accommodated in order to trade EBS products on CME Globex.

System Impact	Template IDs	Message(s)	Field Name	Description
Add new field to support Price Discretion orders	514	New Order Single	DiscretionPrice (tag 845)	The presence of DiscretionPrice on an order indicates that the trader wishes to display one price but will accept trades at another price
	515	Order Cancel Replace Request		
	522	Execution Report New		
	523	Execution Report Reject		
	524	Execution Report Elimination		
	525	Execution Report Trade Outright		
	531	Execution Report Modify		
	532	Execution Report Status		
Add new enum value (99) to represent Good For Session (GFS) orders	514	New Order Single	TimeInForce (tag 59)	Specifies how long the order remains in effect GFS is supported only for EBS
	515	Order Cancel Replace Request		
	522	Execution Report New		
	523	Execution Report Reject		
	524	Execution Report Elimination		
	525	Execution Report Trade Outright		
	530	Order Mass Status Request		
	531	Execution Report Modify		
	532	Execution Report Status		
	534	Execution Report Cancel		

Add new fields to support eFix Matching	525	Execution Report Trade Outright	TradeType (tag 828)	Represents a trade at fixing price
			ExecRestatementReason (tag 378)	Will be present when trade at fixing is assigned fixing price
			BenchmarkPrice (tag 6262)	The price assigned to an eFix Matching which is determined by an automated set market mid-price from a
Add six new fields to support FXSPOT /FXNDF trades.	525	Execution Report Trade Outright	SettlDate (tag 64)	Specific date of trade settlement
			MaturityDate (tag 541)	Date of maturity (aka NDF fixing date)
			GrossTradeAmt (tag 381)	Total amount traded (in notional) in base currency for the Spot
			CalcCcyLastQty (tag 1056)	Total amount traded (in notional) in counter currency
			ContraGrossTradeAmt (tag 5542)	Amount traded (in notional) in base currency for the Spot with this counterparty
			ContraCalculatedCcyLastQty (tag 5971)	Amount traded (in notional) in counter currency for the Spot with this counterparty
Update data type from uint64 to uint64NULL to support Order Cancel and Order Cancel Replace by ClOrdID (tag 11)	515	Order Cancel Replace Request	OrderID (tag 37)	OrderID (tag 37) an optional field in OrderCancelReplaceRequest, OrderCancelRequest
	516	Order Cancel Request		
Add new message types to support Minimum Quote Life (MQL)	564	Execution Report Pending Cancel		Sent in response to OrderCancelRequest and OrderCancelReplaceRequest for an order which is subject to Minimum Quote Life
	565	Execution Report Pending Replace		
Add two new enum value to support Minimum Quote Life (MQL): <ul style="list-style-type: none"> Pending Cancel (6) Pending Replace (E) 	532	Execution Report Status	OrderStatus (tag 39)	Indicates order status. Pending Cancel – OrderCancelRequest cannot be immediately accepted Pending Replace - OrderCancelReplaceRequest cannot be immediately accepted.

Optional and Required FIX Tags for EBS Products

The following fields are required for CME Group futures and options, but optional for EBS products:

- tag 1693-PartyDetailRole=24 (Customer Account)
- tag 582-CTI Code
- tag 1816-ClearingAccountType
- tag 1031-CustOrderHandlingInst
- tag 9537-Location

The following fields are required for EBS products. iLink3 will reject EBS messages when these tags are not populated.

- tag 1693-PartyDetailRole=118 (Operator)
- tag 5392-SenderID

iLink 3 EBS Message Specification

This topic includes:

[iLink 3 Message Header](#)

[iLink 3 Session Layer](#)

[iLink 3 Application Layer](#)



- **Bolded red text** indicates this change supports EBS Market.
- EBS Market does not support Mass Quotes and Order Mass Cancel functionality.

Cancel on Disconnect

All iLink 3 sessions are Cancel on Disconnect (CoD) **mandatory** for all markets on CME Globex. CoD is the auto-elimination of all working orders including GFS orders, when a session stops responding to heartbeat requests without Terminating. Detailed information on CoD is available in [Risk Management Services](#).

EBS orders are from multiple regions (New York, London, Tokyo). In the event of network failure, EBS CoD on CME Globex will be invoked; EBS working orders will be canceled.

For a graceful session disconnect, please refer to Cancel on Conclusion.

Cancel on Conclusion

Cancel On Conclusion (COC) is the auto-elimination of all working orders when a session Terminates and disconnects gracefully—a voluntary disconnect performed by the client system which executes the full Termination process. This is mandatory on all iLink 3 sessions and only applies to EBS Market and eFix Matching Service instruments.

This involves the successful completion of each of the following steps prior to disconnect the FIXP session:

- Client system sends Terminate request message
- CME Group sends Terminate confirmation message to conclude session
- Client system receives Terminate response message

When COC is invoked, CME Globex cancels all working orders under a single iLink 3 session without sending cancel acknowledgments.

It is the user's responsibility to reenter all orders that have been cancelled by COC.



This behavior differs from previous descriptions of graceful Cancel on Disconnect.

Contact Information

For technical development support, contact [Certification Support for Electronic Trading \(CSET\)](#).

For production requests, please contact the [Global Command Center \(GCC\)](#).

For all other inquiries, please contact [Global Account Management \(GAM\)](#).