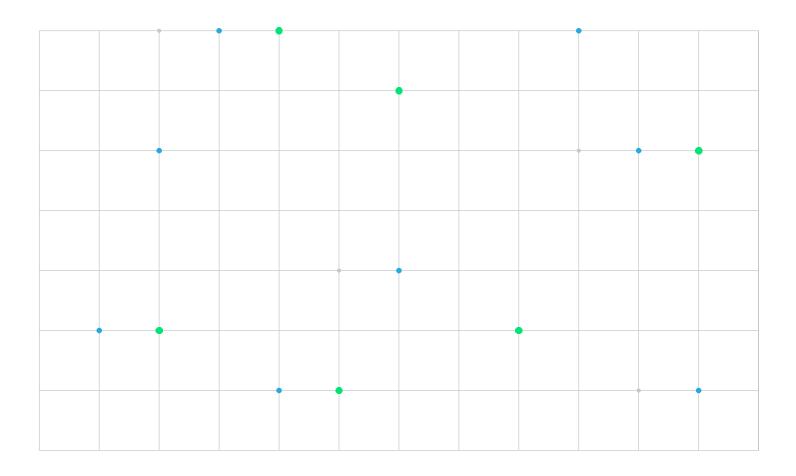




EBS Dealing Rules – Appendix EBS Market







1. Introduction

Capitalised terms in this Appendix have the same meaning as in the Dealing Rules, unless otherwise specified. In addition, these terms have the following corresponding meanings:

CGW	Convenience Gateway, a single point of Order entry for all EBS Market Products on Globex (regardless of the Matching region). Orders received by a Convenience Gateway are routed to the relevant MSGW.
Day Order	An Order that can only be executed on the trade date it is entered.
EBS Ai	Means an order routing protocol to submit orders and receive trades on NEX SEF via Globex.
EBS Market Participant Eligibility Criteria	The document so named setting out the eligibility criteria that Participants are required to comply with in order to trade on EBS Market.
FAK	Fill And Kill
Fixing Order	An Order made by a Participant through the eFix Matching functionality (provided for in Rule 2.4.8), the price of which is determined by the Fixing Price.
Fixing Price	The price of a Fixing Order, determined by an automated set market mid-price from the Operator or a third party market data feed. The Fixing Price will be distributed as soon as practicable after the Fixing Time
Fixing Time	The time that the relevant fix or benchmark underlying a Fixing Order is set for (for the avoidance of doubt, this is the exact time referred to in the fix/benchmark (e.g. 4pm) as opposed to the calculation window over which the Fixing Price is determined (e.g. 3:57:30pm-4:02:30pm)).
FOK	Fill Or Kill
GCC	The CME Global Command Center.
GFID	Globex Firm ID, the Trading Floor code(s) for each Participant on Globex.
GFS	Good For Session
Globex	The electronic trading system technology that the EBS Market trading platform is provided through.
GUS	Globex User Signature, the Trader ID for Authorised Employees on Globex.
IFM	In-Flight Mitigation, as described in Rule 2.5.2.
iLink	The Order routing interface to submit Orders and receive execution reports on Globex.
Institution	The collection of GFIDs that relate to multiple Participants in the same corporate group.
Latency Floor	Has the meaning given to it in Rule 2.6.3.
Maker	A Counterparty who places a Bid or Offer which is executed through EBS Market.





Market View Information	Has the meaning given to it in Rule 2.3.3.
Matching Engines	Globex components that facilitate the Matching of buy and sell Orders of Participants in the Order Book.
Minimum Quote Life or MQL	The time, as determined by the Operator on a per product basis, that a Quote is held on Globex before it can be modified or cancelled by a Participant.
MSGW	Market Segment Gateway, a route for order entry to the Globex Matching Engine for each local region (New York or London for EBS Market on Globex).
NR	Means the New Release environment, as described in Rule 2.2.2.
Order Book	The facilities made available by the Operator for the submission of Orders and the effecting of Deals and Transactions on EBS Market.
Price Band	Is a maximum and minimum Order price band for individual Products and is a pre-trade system control that prevents Participants from submitting a Bid/Offer greater than a certain value (determined by the Operator) through the other side of the market (best Offer/Bid). The value is stated per pair and cannot be changed by the Participant (however, if the Participant using manual trading functionality attempts to trade through the value, they will be presented with a warning). This parameter is intended to systematically prevent a GFS Order being submitted that breaches the coded Price Band value.
Price History Report	Has the meaning given to it in Rule 2.8.2.
Review Rate	Has the meaning given to it in Rule 2.8.9.
SBE	Simple Binary Encoding.
SMP	Self-Match Prevention, an optional functionality on Globex that allows a Participant to prevent the Matching of Orders with common ownership.
Taker	Means, in relation to any Transaction on EBS Market the Participant(s) to a Transaction who accepted the Bid or Offer made by a Counterparty, whether as a buyer or seller.

All capitalised terms not otherwise defined in this Appendix shall have the meaning ascribed to them in the Customer Agreements. In this Appendix, words in the singular include the plural and vice versa and words in one gender include any other gender. A reference to persons in this Appendix shall include a reference to legal persons and natural persons as the context requires. Headings are for ease of reference only and do not form part of this Appendix. Reference to statutory or regulatory provisions or instruments shall include any amendment, modification or re-enactment or re-making thereof.





2.1. Participants are permitted to trade on EBS Market directly in their own name or through a Prime Bank utilising the Prime Dealing Service.

2.2. Eligibility Criteria

- 2.2.1. Participants on EBS Market are required to comply with the EBS Market Participant Eligibility Criteria.
- 2.2.2. Participants are required to connect to the New Release (NR) environment, which allows product and new functionality testing prior to release in production, and pass the relevant conformance and certification tests as defined by the Operator prior to connecting to the live production environment.
- 2.2.3. Participants on EBS Market on Globex are also required to use the AutoCert+ tool for functional certification of client systems prior to accessing the Globex production environment.

2.3. Dealing on EBS Market

- 2.3.1. EBS Market is designed to facilitate the Matching of Orders on an Order Book. A Match creates a Transaction that can result in a Deal or multiple Deals. Participants are legally bound by any Transaction.
- 2.3.2. Each Deal consists of a Maker and Taker. Through iLink, Orders submitted using the same GFID and GUS can be submitted with different SMP IDs and are able to Match. Orders submitted with the same SMP ID will not Match. SMP IDs can be created at a Participant level, and a single SMP ID can be assigned to multiple GFIDs. SMP applies on a per-Order basis on Globex.
- 2.3.3. The Operator provides a feed of market data known as "Market View Information". The Market View Information is available as a credit-screened update and is published to each GFID at intervals determined by the Operator. Market View Information in excess of 24 hours may only be stored if authorised by the Operator.
- 2.3.4. In the case of the Prime Dealing Service whereby a Participant may be utilising multiple Prime Banks, only one Market View Information feed per Prime Bank may be enabled.

2.4. Orders

- 2.4.1. Quotes can be Bids or Offers. Quotes are a means for a Participant to express a limit price (or better) at which they are willing to transact. Quotes are limit Orders that reside in the Order Book and may be subject to a Minimum Quote Life. Quotes that do not immediately result in a Match are considered passive and enter the Order Book.
- 2.4.2. EBS Market on Globex employs two Matching Engines, one each in New York and London (each with a CGW and region-specific MSGW), and CGWs in London, New York and Tokyo. Each Matching Engine is used for a specific set of Products. The reference for which Matching Engine processes the relevant Products is maintained on the Client Systems Wiki and on the CME Reference Data API, each of which may be updated from time to time.
- 2.4.3. Order entry for EBS Market on Globex can be through a CGW or MSGW. Orders sent through MSGWs for Products that are not Matched on that relevant Matching Engine are rejected. CGWs provide an operationally simpler order entry mechanism. An explanation of these components is available on the <u>Client Systems Wiki</u>.
- 2.4.4. EBS Ai is a protocol that allows for Order entry to a CGW.
- 2.4.5. Using the SBE protocol, each iLink session is associated with a GFID and multiple GUS can be used on that session. MSGW sessions are unique to a market segment (New York/London) and CGW are unique to a region (New York/London/Tokyo).





2.4.6. Order types for EBS Market on Globex include the following:

GFS (Good For Session)	GFS Orders remain active in the Order Book until they are completely executed, expire at the end of the session, are cancelled or when the instrument expires (ordinarily, at the end of the trading week for spot FX and the end of the trading day for NDFs).
FAK (Fill And Kill)	FAK Orders are immediately executed against resting Orders. If the Order cannot be fully filled, the remaining balance is cancelled. A minimum quantity can be specified. If the specified minimum quantity cannot be filled, the Order is cancelled. The size of an FAK Order does not impact its order of matching priority.
FOK (Fill Or Kill)	FOK Orders must be fully filled immediately or the entire Order is cancelled. An FOK Order is created by using the FOK qualifier and setting the minimum quantity to the total Order quantity. The size of an FOK Order does not impact its order of matching priority.
Display Quantity	A Display Quantity Order allows an Authorised Employee to set a hidden and shown amount for a GFS Order. Display Quantity Orders allow Authorised Employees to minimize their market impact by only displaying a portion of their overall Order where only the hidden size sits in the Order Book and is subject to being dealt.
Price Discretion	Price Discretion is a 'hidden' Order type that allows Authorised Employees to pre-stage an aggressive Order, which will improve their ability to execute on prices they may have previously missed. Allows an Order to rest and automatically improve its limit price for matching opportunity while maintaining a given visible limit price.
Display Quantity + Price Discretion	An Order which combines both the Display Quantity and Price Discretion features.

- 2.4.7. Quotes that do not result in a Match will remain active in the Order Book until:
 - a) interrupted in accordance with Rule 2.5 of this Appendix;
 - b) interrupted due to ungraceful session disconnect or network failure (known as Cancel on Disconnect);
 - c) in the event of a graceful disconnect, Orders will be cancelled in accordance with the Cancel on Conclusion functionality for all working GFS Orders on session termination or GUI logout;
 - d) interrupted due to the end of the weekly trading session;
 - e) interrupted due to the end of the trading session for instruments that have a designated open/close;
 - f) an auto interrupt is triggered;
 - g) a successive managed Order replaces a prior Order (also known as Cancel and Replace);
 - h) removed by the Operator in accordance with the relevant provisions of the EBS Dealing Rules General Terms;
 - i) cancelled or amended in accordance with the relevant provisions of the EBS Dealing Rules General Terms; or
 - j) Matched in full.
- 2.4.8. **eFix Matching** is a form of trading which allows Participants to submit Fixing Orders, which may only match with other Fixing Orders.
 - a) eFix Matching is available to all Participants; however, Prime Customers are permitted only at the discretion of the Operator.
 - b) Fixing Orders Match on time priority (using the <u>Institutional Priority</u> matching logic on Globex). They can Match immediately to any opposite interest (including a partial Match); however, the Fixing Price and Counterparty will not be known until the Fixing Price is determined and distributed.
 - c) Fixing Orders are subject to time restrictions, as follows:
 - i. Participants can only load Fixing Orders for the current trading day.
 - ii. Shortly before the Fixing Time (ordinarily three minutes, but this may vary according to the relevant type of Fixing Order): (A) input of new Fixing Orders is suspended; (B) Participants whose Fixing Orders are not Matched have their Fixing Orders cancelled; and (C) the balance of any unmatched volume in their Fixing Orders that have partially matched will also be cancelled.





2.5. Interrupt Rules

- 2.5.1. A request to interrupt a Quote can be submitted at any time during the lifetime of the Quote, subject to Minimum Quote Life limitations. Upon receipt of the interrupt at the Matching Engine, no additional Matches will be initiated against the outstanding balance of the Quote. Matches which have been initiated by the Matching Engine prior to the receipt of the interrupt message cannot be interrupted.
- 2.5.2. In-Flight Mitigation (IFM) is an optional feature on Globex that allows Participants submitting cancel/replace messages to prevent overfilling in the event that the original Order is filled while the cancel/replace message is "in-flight" during processing. iLink's default setting (configurable by the Participant) is that IFM is disabled.
- 2.5.3. Participants can cancel their own Orders through the GUI, the FirmSoft interface or via API, and GCC may cancel a Participant's Order.

2.6. EBS Market – The Matching Process

- 2.6.1. Each Participant must establish a relationship with its Counterparties, satisfy itself of the creditworthiness of its Counterparties and extend credit to them as it sees fit. For a Match to be made in EBS Market between two Participants, mutual credit must exist between those Participants. If credit has not been established with or given by another Participant, or when credit given by or to another Participant is exhausted, the prices submitted by each Participant will not be dealable prices for the other.
- 2.6.2. Once an Order is submitted, EBS Market will immediately attempt to Match the instruction with a Bid/Offer using a matching algorithm assigned to the instrument as per the CME Globex Reference Sheet, available on the Client Systems Wiki. The available matching algorithms are (each subject to Latency Floor under Rule 2.6.3:
 - a) Size Priority, with further detail on the matching process on the Client Systems Wiki; and
 - b) FIFO, with further detail on the matching process on the Client Systems Wiki.
- 2.6.3. Latency Floor is an augmentation to the EBS Market Matching process aimed at ensuring that speed as a standalone strategy is not a pre-requisite for success on EBS Market. It is explained in detail on the <u>Client Systems Wiki</u>. Latency floor is not applicable to eFix Matching.
- 2.6.4. Once Hits and Quotes have been Matched, any successful Deal will depend on the available Credit Limits remaining for each GFID. If there is insufficient mutual credit to complete the Deal for the full size of the Deal, the size of the Deal will be reduced to the amount of mutual credit available. In order for a Deal to complete, the size of the Deal must not be greater than the amount of available credit given by the Counterparty who has the lower amount of credit available for the other.
- 2.6.5. The minimum Deal amount also depends on the relevant instrument's minimum Deal amount and/or minimum Deal increment. Accordingly, the reduced amount of mutual credit available between Counterparties must be greater than the instrument's minimum Deal amount, otherwise the Deal will not complete.
- 2.6.6. When a Match or multiple Matches occur EBS Market initiates processing to complete each Deal, including verification that sufficient credit exists between the two Counterparties.
- 2.6.7. Once a Match takes place, credit is reduced for each Counterparty with the other for the size of the Deal. If there is no successful Deal, then the credit of the two Parties is unaffected.
- 2.6.8. The Participant may reduce the amount of outbound credit consumed by Deals using the discount factor. Using the discount factor a Participant can assign a percentage anywhere between 0-100 thus enabling a reduction of credit line consumption by a given amount. It is the sole responsibility of the Participant to set and monitor this percentage.





2.7. Deal Status

- 2.7.1. A Deal is done when the Deal confirmation is processed in the Matching Engine and is recorded by the system. If for any reason EBS Market fails to process all Deal messages or fails to process all Deal messages in a timely fashion as defined by EBS Market that Deal shall be determined as being in an unverified state. In such cases GCC will contact all Counterparties to the trade and notify them of the status of the trade "Done" or "Not Done".
- 2.7.2. Where a Deal is in doubt or unverified due to EBS Market disruption, the Participant must contact GCC as the first point of contact for all questions related to issues of Deal status. The Operator is responsible for determining whether such a Deal was completed or not, in accordance with Rule 2.7.1. The determination of the GCC team is final and will supersede any previous or subsequent system status.

2.8. Error Trades

In accordance with Rule 8 of the EBS Dealing Rules – General Terms, Participants that consider a Transaction to be an Error Trade must contact GCC as soon as possible and, in any event, within 8 minutes of the Transaction. GCC will then use reasonable endeavours to put the Counterparties in contact with each other, using the contact information made available to GCC by the Counterparties.

Provision of Review Rate

- 2.8.1. In accordance with the EBS Dealing Rules General Terms, Participants are bound by any Transactions effected through EBS Market. The Operator cannot facilitate cancellation of Transactions on the EBS Dealing Service. However, the Operator may provide a Review Rate upon a Participant's request to assist Participants to bilaterally agree to amend a Transaction, in accordance with the terms below.
- 2.8.2. If the Participant requests actual Deal information related to a Deal query, GCC will gather relevant Deal information from the Participant and where possible, use reasonable endeavours to supply the Participant with additional EBS market data (the "**Price History Report**").
- 2.8.3. The information contained in the Price History Report is indicative of the whole of the EBS Market FX market in the specified instrument. The Price History Report does not include all Deals or all top of book price changes. Highest paid and lowest given dealt prices within the report timeslice will be included, as will top of book price changes per timeslice.

Review of a Transaction's Size

2.8.4. In the event of a trade dispute with regards to the size of a Transaction, Participants shall bilaterally agree a course of action. The Operator will not review the size of any Transaction on EBS Market.

Review of a Transaction's Price

- 2.8.5. The Operator shall initiate the review of a Transaction's price on request from a Participant. A Participant's request for review must be made by calling GCC within 8 minutes of the execution of such Transaction. Telephone requests must be followed up by email within 15 minutes of the telephone call. Any other form of communication with the Operator will not constitute a request as set forth in this Rule.
- 2.8.6. The Operator may determine, in its absolute discretion, that a Transaction shall not be subject to a review of its price:
 - a) where a review request is not made in compliance with Rule 2.8.5;
 - b) during volatile market conditions;
 - c) upon the release of significant news; or
 - d) any other circumstances in which the Operator deems to be appropriate.





Review Parameters

- 2.8.7. Upon a request in accordance with Rule 2.8.5, the Operator shall review EBS market data and produce a Review Rate in accordance with Rule 2.8.9.
- 2.8.8. If there is insufficient EBS market data, the Operator will inform the Counterparties accordingly and the Operator will not provide a Review Rate.
- 2.8.9. The **Review Rate** shall be calculated based on a mid rate determined by reference to EBS market data, +/-110% of the Price Band value for the relevant Product (depending on whether the Transaction was above or below the mid rate).

Example:

EUR-USD mid rate from EBS market data is 1.13845 Price Band is 30 pips

Review Rate = 1.13845 + (0.03 * 1.1)

= 1.13845 + /- 0.033

= 1.13515 (where the Participant requesting the review of the Transaction had sold EUR and bought USD) or 1.14145 (where the Participant requesting the review of the Transaction had bought EUR and sold USD).

Participant Behaviour

2.8.10. Should a Participant frequently be a Counterparty to reviewed Transactions, their conduct may be reviewed. If the Operator determines that their conduct constitutes disruptive trading, it may take action it considers appropriate under the EBS Dealing Rules – General Terms, including Rules 13.3, 13.4, 14.1.1 and 14.1.6.

2.9. Additional Rules for iLink

- 2.9.1. iLink is a means of accessing EBS Market. iLink is a message-based interface that supports a two-way message exchange between EBS Market and the Participant's application.
- 2.9.2. iLink limits the application messages and cancellation requests that can be submitted within a rolling time window (throughput limit) defined by the Operator. See details on Messaging Controls here.

2.10. Credit and Settlement

- 2.10.1. It is the responsibility of the Administrator (or Prime Bank in the case of the Prime Dealing Service) to maintain Credit Limits with each Counterparty with whom the Participant wishes to Deal. It is also the responsibility of the Administrator to set currency pair permissions.
- 2.10.2. In the case of the Prime Dealing Service the Administrator must also maintain Credit Limits between the Prime Bank and the Prime Customer. An Authorised Employee on a Trading Floor can Deal with a Counterparty if there is sufficient mutual credit to Deal in the minimum Deal size in any Product.
- 2.10.3. Where new Participants are granted access to EBS Market, it is for the Administrator to review the status of these prospective Counterparties for credit purposes and for the Participant (in the case of the Prime Dealing Service, the Prime Bank) to consider allocating Credit Limits to each such Counterparty or group of Counterparties. It is also the responsibility of the Administrator to review the credit status of existing Counterparties.
- 2.10.4. EBS Market allows Participants to create and assign credit to groups of GFIDs that those Participants consider to be an Institution. Once credit is applied to that group, it applies to trading with all Trading Floors cumulatively within the Credit Group. Credit is also assigned by grantor groups, allowing outbound credit at an Institutional level.





- 2.10.5. In accordance with the Customer Agreement, each Participant must use reasonable endeavours to maintain Credit Limits with other Participants of EBS Market. The Operator may, at its discretion, suspend access to EBS Market where it determines that minimum mutual Counterparty credit access is not sufficient. In the case of the Prime Dealing Service, in accordance with the Prime Bank Master Agreement, each Prime Bank must use reasonable endeavours to maintain Credit Limits with Participants of EBS Market.
- 2.10.6. EBS Market provides warning messages indicating when the credit used for a Counterparty or group of Counterparties has reached a certain percentage of the Credit Limit for that Counterparty or group of Counterparties. This percentage is set by the Administrator. EBS Market will provide a message when the Credit Limit allocated to a Counterparty or group of Counterparties has been exhausted or is insufficient to allow a Deal to take place for the minimum Deal size.

2.11. Participant Support Obligations

- 2.11.1. If an Authorised Employee suspects a problem with EBS Market which it considers may affect its use of EBS Market, that Authorised Employee must immediately:
 - a) remove all of its Quotes from EBS Market; and
 - b) contact GCC.
- 2.11.2. The Operator may require, at its sole discretion that:
 - a) all Quotes submitted by that Trading Floor be removed;
 - b) all Authorised Employees of that Trading Floor stop using EBS Market; and / or
 - c) the Participant provides information in connection with the issue to GCC.

2.12. Trading Policies and Guidelines

- 2.12.1. The Schedule, which forms part of the Dealing Rules and which will be updated from time to time, specifies in more detail, Rules relating to:
 - a) capacity and access of EBS Market; and
 - b) trading rules on EBS Market.





Schedule EBS Market Trading Policies and Guidelines

This Schedule applies to all Participants' use of EBS Market.

1. Trading Rules

1.1. MQL - Minimum Quote Life

- 1.1.1. The Operator systemically enforces an MQL on selected currency pairs. The MQL applies to all Quotes submitted iLink.
- 1.1.2. The MQL timer starts once the Order has been released by the Latency Floor batch. If multiple cancel requests are submitted before the minimum time period elapses, they will be held until after the Latency Floor batch until the MQL has expired.
- 1.1.3. Where applicable the MQL for other currency pairs can be found in the <u>Client Systems Wiki</u> and on the Referential Data API.
- 1.1.4. The introduction or recalibration of an MQL in a currency pair shall be communicated by the Operator with not less than 24 hours' notice.

1.2. Messaging Controls

1.2.1. Orders can be rejected if more than a predefined number of messages are sent during a rolling window. If a Participant reaches an initial threshold, new messages are rejected. After a second threshold, the customer's connection is terminated. This protects EBS Market technology and against a Participant's potential algorithmic trading issues. Messaging thresholds are explained and set out in the Client Systems Wiki.

1.3. MSGW Safeguards

1.3.1. Globex includes certain MSGW safeguards relating to iLink messages that are not sent completely in a single network packet or are received out-of-order. These are set out in the <u>Client Systems Wiki</u>.

1.4. Order Size

1.4.1. EBS Market on Globex has restrictions on the maximum and minimum quantity Order size for a given Product. Orders above/below these thresholds are rejected. Participants are able to configure lower maximum Order sizes for themselves.

1.5. Kill Switch

1.5.1. Prime Banks can make use of the kill switch functionality to stop Order entry. The Participant's connection is maintained but all Orders are cancelled and new Order entry is blocked.

1.6. Emergency Halt

1.6.1. The Operator has the ability to pause or halt EBS Market, or specific Products on EBS Market, on a per-Participant or whole of market basis. In the event of a trading halt, Day Orders are cancelled. Participants should maintain connectivity but Orders will stop Matching. New Orders will be rejected from the Matching Engine. In the pause state, Order cancellations are permitted.

1.7. Price Banding

1.7.1. The Operator maintains an allowable price range for a given Order based on the most recent reference price. This mitigates against Authorised Employees from submitting Orders with erroneous prices. On the EBS Workstation, these values are set by the Participant and can be clicked-through if necessary.





1.8. Quote Fill Ratio

1.8.1. The Operator monitors and enforces a quote fill ratio, as set out in the EBS Quote Fill Ratio Policy.

1.9. Messaging Efficiency Program

1.9.1. The Operator monitors and enforces a messaging efficiency program (MEP), applied across certain currency pairs, which is designed to encourage more efficient quote activity at Top of Book (ToB). It is set out in the EBS Market Messaging Efficiency Program Policy.

Enforcement/penalties for non-compliance:

- a) Formal written notification of contravention of these Dealing Rules
- b) The Operator reserves the right to restrict throughput capacity
- c) Ability to aggress via Quote Submit only (i.e. disabling of the Hit Submit order type)
- d) Suspension from EBS Market



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