

EBS Credit Overview on CME Globex

To support the integration of EBS Market and eFix Matching on CME Group services, EBS Credit functionality will be made available for all EBS instruments.

EBS Credit functionality allows a market participant firm to manage its prime and bilateral risk with other market participants for all EBS instruments comprised of Spot, precious metals and non-deliverable forwards (NDF) on EBS Market, eFix Matching Service and EBS Direct trading venues.

- **EBS Market** - a central limit order book with pre-screened bi-lateral credit limits that allows customers to match orders with other participants and leave resting orders in the market.
- **EBS Direct** - a fully disclosed, relationship-based platform that allows Liquidity Providers (LPs) to stream tailored prices direct to Liquidity Consumers (LCs). EBS Select is non-disclosed version.

CME Group offers the [EBS Risk Management API](#) and GUI for clients to manage their credit profiles as follows:

- Retrieving existing limits and credit utilization
- Setting both bilateral and prime limit values on existing grantee credit groups
- Kill and unkill functionality (API only)

The EBS Credit model on CME Globex applies global credit limits between counterparties to control all of their trading on EBS Market, eFix Matching Service and EBS Direct. These limits control the exposure of one counterparty to another regardless of execution venue.

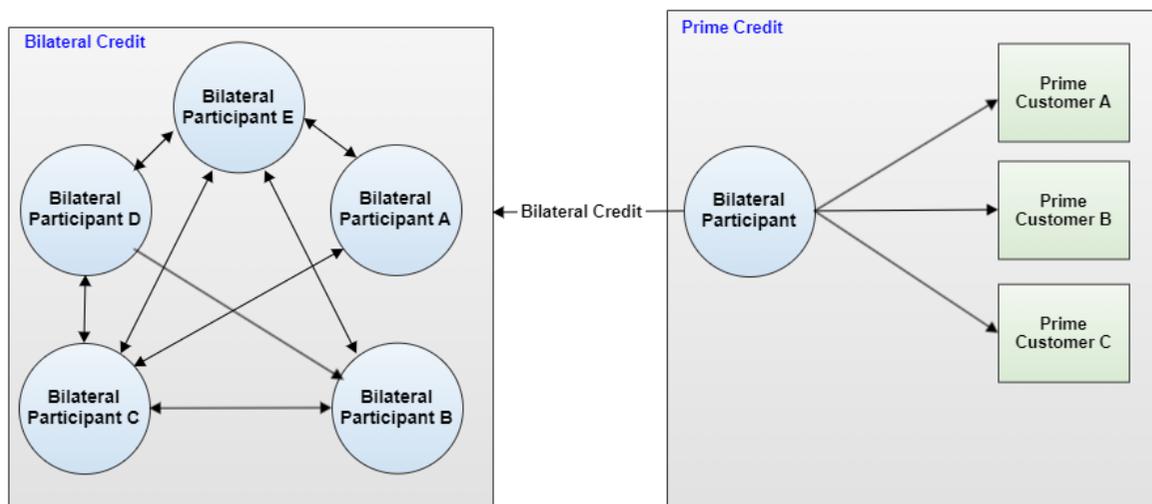
Market participants will have the ability to set credit limits on their market counterparties to control counterparty exposures in the Spot, precious metal and NDF markets. Credit limits may be set by a credit grantor in one of the following credit limit currencies (CLC):

- Euro - EUR
- US Dollar - USD
- British Pound - GBP
- Swiss Franc - CHF
- Australian Dollar - AUD

Credit limits established within EBS Credit will apply to all trading between counterparties on the multiple trading platforms located in London and New York.

EBS Credit supports daily credit limits extended from one market counterparty to another (Bilateral Credit).

As an administrative participant type, an EBS Prime Broker firm extends credit to other Bilateral participants (market counterparties). This type of credit is referred to as **bilateral credit** or **trade-time credit**. For prime customer relationships, credit is extended from the credit parent to the prime customer trading participant. A prime customer trading participant may have as its direct credit parent either a Bilateral trading participant or a Prime Broker administrative participant.



Contents

- [Revision History](#)
- [Key Events and Dates](#)
- [Testing and Certification](#)
- [EBS Credit on CME Globex Features](#)
 - [User Roles and Privileges](#)
 - [Credit Entity Structures and Limit Types](#)
 - [Grantor Credit Groups and Institutional Credit Granting](#)
 - [Participant Types and Trading Status](#)

- [EBS Credit Eligibility](#)
 - [EBS Market Credit Application Rules](#)
 - [EBS Direct Credit Application Rules](#)
- [Credit Profiles and Credit Pools](#)
 - [Credit Pool Parameters](#)
- [Credit Limit Currency and Currency Exchange Rates \(Conversion Rates\)](#)
- [Credit Limit Fields Applicable to a Credit Pool](#)
- [Participant \(GFID\) Trading Status and Grantee Credit Group Management](#)
 - [Daily Reset of Credit Utilization](#)
- [Credit Limit Methodologies](#)
- [Scaling Factors For Bilateral Credit Utilization](#)
- [Allow/Disallow Functionality](#)
- [Liquidation Mode](#)
- [Global Credit Rebalancing](#)
- [Compression/Distributed Netting](#)
- [Kill Switch](#)
- [Credit-Screened Market Data](#)
- [Alerts](#)
 - [Critical Alerts](#)
 - [Threshold Alerts](#)

Revision History

Date	Description
September 22, 2021	Updaed: Compression/Distributed Netting
September 15, 2021	Added: <ul style="list-style-type: none"> • Compression/Netting • Alerts
August 31, 2021	Added: <ul style="list-style-type: none"> • Allow/Disallow Functionality • Liquidation Mode

Key Events and Dates

The full New Release and Production launch schedule is available at [EBS Market on CME Globex Launch Schedule](#).

Testing and Certification

Customer testing for EBS Credit functionality will be supported in the New Release environment, allowing client systems configured for prime and bilateral credit will have the opportunity to test credit scenarios with related messaging and consume credit screened market data in the designated currency pair - US Dollar/Chinese Yuan (USD/CNH).

- Bilateral credit will be unlimited to all other bilateral GFIDs.
- One bilateral GFID with no credit to any other bilateral GFID will enter orders in the designated pair.
- Orders entered against a counterparty resting order with no credit will result in the aggressing order resting on the book.
- Client systems with insufficient credit will display orders on the Ultra Market Data feed but not on the Credit Screened market data feed.

An EBS Risk Management API and GUI are available for clients to manage their credit profiles. API clients are required to complete a functional certification via Autocert+ tool prior to production access.

For more information please refer to the [EBS AutoCert+ Webhelp](#), and the [EBS Risk Management GUI User Guide](#).

EBS Credit on CME Globex Features

User Roles and Privileges

The following user roles and privileges will be supported, managing credit-granting functions for each grantor group.

Role	Privileges
EBS Bilateral Risk Administrator	Manages bilateral credit risk for Bilateral and/or Prime Broker Delegate (PBD) participants and sets credit on other market counterparty participants.
EBS Prime Risk Administrator	Manages credit on Prime Customer, Prime-of-Prime Broker and Prime-of-Prime Customer participants.

Credit Entity Structures and Limit Types

Risk administrators from credit grantors place firms into grantee credit groups and set gross and/or net limits on these credit groups.

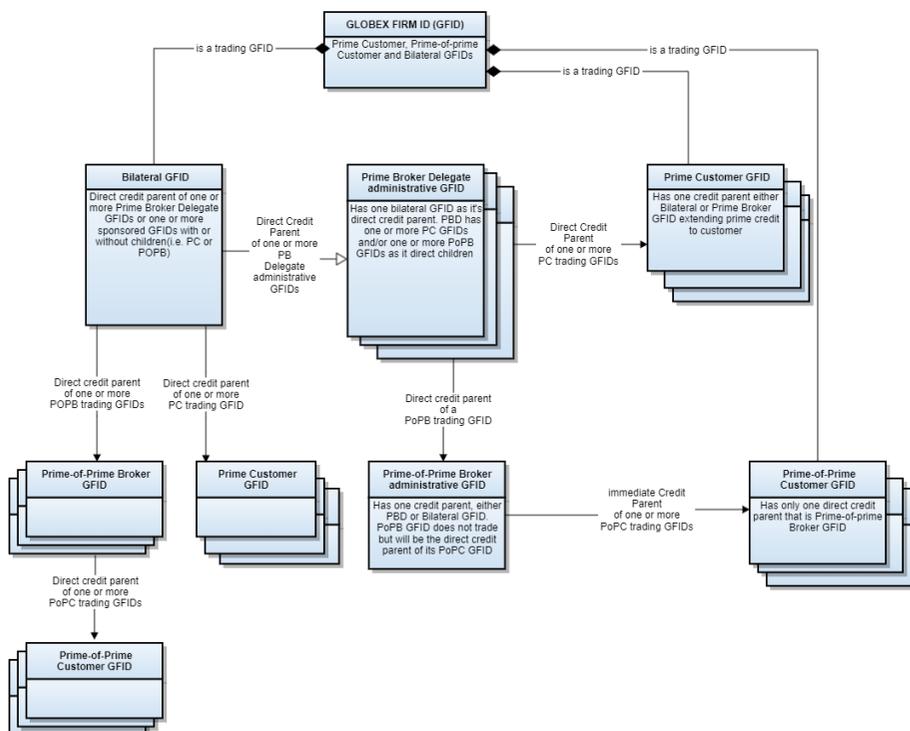
Supported firm types include:

- Bilateral
- Prime Broker Delegate (PBD)
- Prime-of-Prime Broker (PoPB)
- Prime Customer (PC)
- Prime-of-Prime Customer (PoPC)

This credit framework creates a tiered prime credit structure such that when a PoPC trader enters an order, it will be subject to two sets of prime limits:

- the limit set on the PoPC by the PoPB and
- the limit set on the PoPB by its credit parent.

This diagram illustrates the firms that may trade on EBS Credit and the credit parent/child hierarchy.



Grantor Credit Groups and Institutional Credit Granting

The credit grantor/grantee relationships described below conform to the following rules:

- The entity that extends outbound credit will be a **grantor group** that may contain one or more GFIDs from the same institution.
- Every firm will have an Institution attribute and this will enable the grouping of firms belonging to the same institution
- If the grantor group contains a bilateral firm and/or a PBD firm, then they may form:
 - bilateral grantee groups containing one or more bilateral firms
 - prime grantee groups containing one or more PC firms or one or more PoPB firms.
- The grantor group that extends credit to a prime grantee group must contain the direct credit parent of each GFID in the prime grantee group.
- PC firm will not have credit children, but PoPB firm will have credit children.
- Prime risk administrators for grantor groups containing one or more PoPB firm will be able to form prime grantee groups containing their PoPC firms and set prime credit limits on these grantee groups.

Note: the **Institution** attribute on each firm allows the grantor of credit to group together bilateral GFIDs from a particular institution and grant credit to that group. This selection method approximates institutional credit granting. The institution attribute is also used to ensure that firms in a particular credit grantor group are all from the same institution, which is a requirement of the credit system.

Globex Firm ID (GFID), identifies market participants and is used to segregate customer or business unit activity. Authorized users can create and manage Globex Firm IDs (GFID). Globex Firm IDs are required when requesting sessions.

- A company can have more than one GFID for each venue (market).
- A GFID can only be assigned to one company.

Summary of Grantor Credit Group Structure

Grantor Group Type	Credit Limit Type	Grantee Group Type
Bilateral and Prime Broker Delegate GFID Grantor groups	Bilateral	Groups of one or more bilateral GFIDs
	Prime	Groups of one or more prime customers
		Groups of one or more prime-of-prime brokers
Prime-of-Prime Brokers Grantor Groups	Prime	Groups of one or more prime of prime customers

Participant Types and Trading Status

The following outlines Participant types and their functions within the system

Participant Type	Description	Trading Status
Bilateral	<ul style="list-style-type: none"> • An EBS bilateral firm associated with one or more prime broker firms. Considered the Prime Parent of the PBD firm. • A bilateral firm provides their prime broker firm or firms with inbound credit. • A PC may have a bilateral GFID as its direct credit parent, i.e., without having a Prime Broker Delegate firm as its direct credit parent. 	✓
Prime Broker Delegate (PBD)	<ul style="list-style-type: none"> • Provides credit (outbound credit) to bilateral firms and to associated prime customer firms. • PBD firms will not be visible to grant credit to, and, when their prime customers trade, will utilize inbound bilateral credit of prime parent. • Every PBD code has exactly one associated prime parent code. 	✗
Prime Customer (PC)	<ul style="list-style-type: none"> • Trading participant firm that trades in the market using a prime broker delegate or bilateral parent GFID for credit and settlement • A PC will have exactly one direct credit parent GFID who is either a PBD or a bilateral GFID • The PC trades in the bilateral (interbank) market using the name of and credit extended to its prime parent. 	✓
Prime-of-Prime Broker (PoPB)	<ul style="list-style-type: none"> • A risk administrator from the PoPB firm provides prime credit to their prime-of-prime customers. • This participant type has one direct credit parent that is either a bilateral or a PBD firm type. • The credit parent will grant the PoPB a prime credit line that will be used whenever a customer of the PoPB enters an order or trades. 	✗
Prime-of-Prime Customer (PoPC)	<ul style="list-style-type: none"> • Trading participant type that is a customer of a prime-of-prime broker. • PoPCs are usually retail customers • When a PoPC trader enters and order or trades, the trader will use credit granted to two different prime grantee groups; one prime grantee group containing his PoPC firm and another grantee group containing his credit parent (PoPB) firm. This is a tiered credit structure. Both credit limits must pass a credit check for the order to be accepted into the market. • The identities of these PoPCs are only known to their credit parent (PoPB) and are not known by the credit parent of the PoPB. In general, only the direct credit parent of a participant will be able to see the identity of that participant in the EBS credit system. This is true for PCs, PoPBs and PoPCs. 	✓

EBS Credit Eligibility

Each Bilateral GFID is required to meet minimum mutual counterparty credit access criteria (e.g. must have bilateral credit access to 30% of market participants or requires Take Only mode).

For a Prime Broker the bilateral credit is 80% or as in the EBS Dealing rules.

- If a Participant temporarily falls below the minimum criteria, then they may be subject to EBS-enforced penalties (e.g. only allowing FAK/FOK orders, suspending services for specific currency pairs or removing trading capabilities until minimum access is met).
- More restrictive credit eligibility requirements apply to clients acting as a Prime Broker.

EBS Market Credit Application Rules

Application of EBS Market credit conforms to the following:

- **Prime Customer Order Entry** - available credit must equal/exceed order entry value else order will be rejected.
- **Bilateral GFID Order Entry** - no credit will be charged at order entry. If credit is exhausted with a counterparty, then the counterparty will not have a market data view for the order (Credit Screened market data).
- **Matching** - if an order can match only partially due to insufficient bilateral credit, then it will match up to the quantity within the credit limit. Any remaining quantity will match with other participants where credit is sufficient, will rest in the market, or be canceled, as per order instructions.
- **Credit Update** - A credit update never causes:
 - a working order to trigger a match (unless the order has a choice price and adds intraday limit for the counterparty)
 - a working order to be auto cancelled even if there is a daily adjustment reducing credit to zero (auto cancellation will only occur if the GFID is moved to another credit group or the no credit group intra-session)

EBS Direct Credit Application Rules

Application of EBS Direct credit conforms to the following:

- **Credit check** - All trading must pass the credit checks for a trade to occur, i.e., a trade between the Liquidity Provider (LP) and the Liquidity Consumer(LC) must pass a credit check before allowing the LP to have a last look. Credit limit update or credit exhaustion can stop the quote stream. For Liquidity Providers that choose to manage credit off-system, there is an option to establish infinite credit with LC counterparties so all proposed trades to the LP by these LCs will always pass the LP-side credit check.
- **Credit utilization** - LP credit is not utilized until quote is aggregated and the trade is accepted.
- **Rejected Trade** - If an LP rejects the trade proposal of an LC in the last look period, this will return credit back to the LC's available bilateral (and possibly prime) credit pool.

Credit Profiles and Credit Pools

EBS Credit supports one-pool and two-pool credit profiles for credit grantors (grantor groups) to manage outbound credit. All limits set on credit pools are global limits subject to allocation and rebalancing of that allocation across trading venues.

Credit Profile	Description
One-pool credit	Single limit on all products. Referred to as the ALL credit pool.
Two-pool credit	<ul style="list-style-type: none"> • Spot credit pool (limit applicable to orders/trades in all Spot products) • NDF credit pool (limit applicable to all products that are not Spot including precious metals and NDFs)

A grantor group may only have one of the two possible credit profiles active during a given trading week. This means all of a credit grantor's counterparties will be subject to either one-pool or two-pool credit in a given week. Changes to the active credit profile will only be enacted over the weekend.

Changes to the status of an active credit profile can only be enacted by the GCC on behalf of a credit grantor.

Credit Pool Parameters

One-pool credit (All Credit) featuring the Gross and NOP credit limit on a grantee credit group may only have:

- For the All credit pool
 - one Default Credit Limit value for the Gross limit type or
 - one Default Credit Limit value for the NOP limit type.

Setting up both Gross and NOP is permitted.

Two-pool credit featuring Gross and NOP credit limit on a grantee credit group may only have:

- For Spot credit pool
 - one Default Credit Limit value for the Gross limit type or
 - one Default Credit Limit value for the NOP limit type.
- For NDF credit pool

- one Default Credit Limit value for the Gross limit type or
- one Default Credit Limit value for the NOP limit type.

Setting up both Gross and NOP is permitted.

Credit Limit Currency and Currency Exchange Rates (Conversion Rates)

All EBS risk admins creating credit groups and setting limits on credit pools must establish a credit limit currency (CLC) for their grantor group.

- The credit currency may be set to one of five credit limit currencies supported: EUR, USD, GBP, CHF or AUD.
- Changes to the credit limit currency of a given grantor group or the establishment of a new credit limit currency for a new grantor group, will be implemented by the EBS market control admins on behalf of the group.
- Changes to CLC currencies may only be implemented over a weekend.
- The currency exchange rates (conversion rates) used to convert the traded currency quantity to the appropriate credit limit currency quantity for credit utilization will be updated weekly.
- If an exchange rate is manually input by EBS Market Control staff, either to correct an error or update a significantly outdated rate, the new inputted exchange rate will be applied to each new order or trade and it will not update either reserved credit for existing orders or committed credit for trades occurring previous to the change in the rate.

Credit Limit Fields Applicable to a Credit Pool

EBS Credit supports the following values for each credit pool within a credit profile. All values are expressed in millions in the Credit Limit Currency chosen by the credit grantor.

- **Current Daily Credit Limit** - View only field that populates with the value in the Default Daily Credit Limit at the start of every new trade date (5:00 pm New York Time)
- **Default Daily Credit Limit** - If a new value is set intra-day, it will take effect and become the Current Daily Credit Limit automatically on a change in the trade date (5:00 pm New York Time). For a new grantee credit group, the first Default Daily Credit Limit input becomes the Current Daily Credit Limit immediately.
- **Today's Adjustment** - The inputted value may be positive (negative) and is used to add to (subtract from) the Current Daily Credit Limit and effect a change in the Available Balance amount immediately.



Changes to the Today's Adjustment field will affect the Available Balance amount but will not affect the displayed Current Daily Credit Limit amount

- **Available Balance** - Display the amount of credit remaining in the credit group
- **Warning Percentage**: May be set to between (1% - 99%) and is used to inform dealers and EBS risk admins when a grantee credit group has a low available credit limit. This warning will display on the dealing screen and will cause an email to be sent to registered email recipients for the grantor group.

Participant (GFID) Trading Status and Grantee Credit Group Management

EBS Credit on CME Globex supports the following grantee credit groups for each counterparty participant:

Grantee Credit Status	Description
Unassigned grantee	default value, new participants (GFIDs) for a grantor group for which no credit decision has been made. Risk admins will be prompted to make credit decisions on firms in the unassigned group.
Grantee has Credit	decision has been made to assign a new participant to a grantee credit group and grant credit
No Credit	grantor has decided not to grant credit to the participant and has assigned the new participant to their No Credit group.

A participant's GFID may be moved from one grantee credit group to another intraday. Credit will be utilized in the grantee credit group that the GFID is in when the credit request is made. Trades will always utilize credit in the credit group that the GFID is in when the trade occurs.

Grantee Credit Group Types

Grantee Group Type	Credit Type
Bilateral Grantee	Bilateral Credit - checked and committed at Trade time
Prime Grantee	Prime Credit - checked and reserved at order entry , committed at trade time

Daily Reset of Credit Utilization

After credit utilization from trades is reset at 5 pm NYT, credit utilization will be recalculated based on existing working orders. There are two cases in which a prime limit may be exceeded.

- working orders for a prime grantee group no longer have offsetting trades and a prime limit is exceeded
- the new effective Current Daily Limit value is less than the credit required to support existing working orders

In both cases, existing working orders will remain working in the market. An email message will be sent to the credit grantor risk admin alerting the admin of the limit breach.

Credit Limit Methodologies

EBS Credit supports gross and/or net credit limit value per bilateral credit entity relationship. Bilateral credit entities are customized groups of bilateral GFIDs referred to as **bilateral grantee credit groups**.

A single gross limit, a single net limit, or both can be established for each credit pool associated to a bilateral grantee credit group and will apply to all trading between the counterparties in EBS Market, eFix Matching Service and EBS Direct.

Credit enforcement between bilateral parties may be on a gross and/or net basis and is enforced at the time of trade:

- **Gross credit limit** - controls settlement risk with counterparties. Buys and sells are summed to a gross exposure value
- **Net Open Position credit limit** - controls the aggregate net long and aggregate net short exposures at the currency level with a counterparty.

Available credit is reset at the beginning of each trading day to its starting value.

Scaling Factors For Bilateral Credit Utilization

EBS Credit will support product scaling factors, which reduce (or increase) the bilateral credit amount utilized for a given trade in a particular instrument with a particular counterparty.

- **Spot currency pairs**: support a single Spot Scaling Factor value between **0%(zero usage) - 100%(full notional usage)** for a grantor group which will apply to trades with specified bilateral counterparties for specific spot currency pairs.
- **NDF currency pairs**: support several types of NDF contracts with various tenors, each of which are non-deliverable forwards.
 - For a given credit grantor, each forward instrument will have a unique NDF Scaling Factor value between **0% - 200%** that will apply to trades with all bilateral counterparties.
 - There is no limit to the number of different NDF scaling factors that may be used but each individual forward instrument may have only one NDF Scaling Factor applied per credit grantor.

Scaling factor calculation for Spot or NDFs will only be used to adjust Gross credit utilization as follows:

- Utilization calculation = (Spot SF % or NDF SF %) x (Base Currency Amount Traded) x (Conversion rate to Credit Limit Currency).

Allow/Disallow Functionality

Allow/Disallow functionality will suspend counterparty trading activity within a grantor or grantee group. This functionality will allow the risk administrator to suspend or unsuspend trading for a grantor or grantee group through the Risk Management UI. More details on the use of the Risk Management UI when available. Allow/Disallow functionality will suspend counterparty trading activity with a specified GFID in a grantee credit group.

Liquidation Mode

When a counterparty firm is in a bilateral or prime grantee credit group that is in **liquidation only mode**, only trading that reduces existing NOP exposure will be allowed.

Net position must be opposite the trade on both currencies and can be applied to:

- Prime limits or
- Limits set by institution for itself

Liquidation only mode can be applied from a Prime Bank to a Prime Customer GFID; once selected, only trading that reduces existing NOP exposure will be allowed.

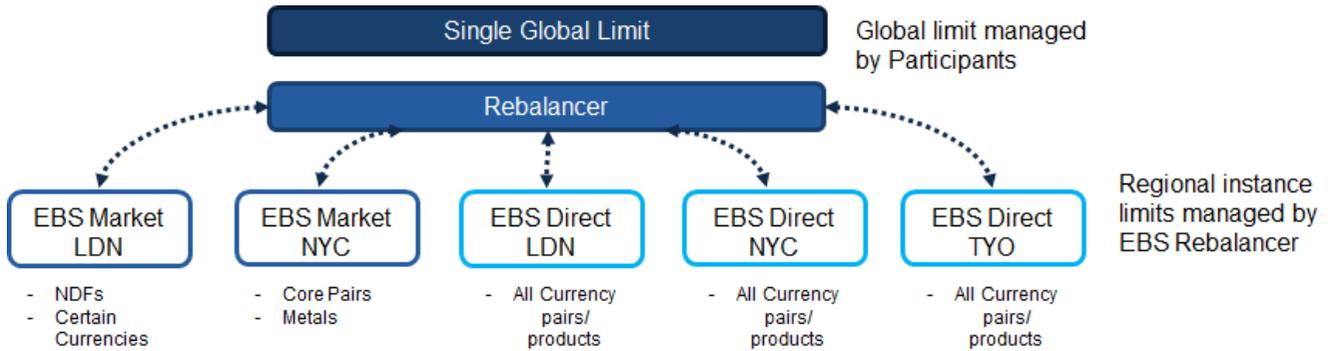
Global Credit Rebalancing

EBS Credit will support global credit limit(s) (Gross, NOP or both) assigned to a given grantee credit group. Each global limit will be split and allocated to the trading venues in which the credit grantor and credit grantee participants may trade. Each global limit may be split and allocated to up to 5 trading venues (EBS Market NY, EBS Market London, EBS Direct NY, EBS Direct London, EBS Direct Tokyo). The split limits will control trading within the trading venues locally, with credit decisions made immediately at the point of order entry or trade match within the trading venue. Trading activity in each region will be sent to a single global location, the trades compressed to a single global position and credit rebalanced between the trading venues. This process is designed to efficiently distribute and utilize credit, perform fast credit checks in each trading venue and ensure the global credit limit does not exceed.

EBS Credit rebalancing enables credit to be distributed between trading instances resulting in more efficient use of credit.

- EBS Market - London, New York
- EBS Direct - London, New York and Tokyo

Credit will be pushed to instances where it is needed when excess is available in another instance resulting in fewer credit exhausts and more efficient trading.



Compression/Distributed Netting

EBS Credit will support global utilization values (Gross & NOP) across the five applicable trading venues. Compression is a mechanism to offset global positions across 5 venues to maximize the available trading limit for customers. Compression only applies to Net Open Position (NOP) limits.

EBS Credit will support global utilization values (Gross & NOP) for a GFID across EBS trading venues. Compression only applies to Net Open Position (NOP) limits.

Local netting solution nets currencies across instruments.

For example: increasing USD position by selling EUR/USD and then decreasing USD position by selling USD/JPY.

Distributed netting solution offsets a position on one EBS trading platform with an opposing position on another EBS trading platform.

For example: increasing USD position by selling EUR/USD on EBS Market and decreasing USD position by selling USD/JPY on EBS Direct.

Kill Switch

The activation of Kill Switch allows credit providers to disable clients from trading on execution venues in real time. The functionality allows EBS prime risk admin to kill (and unkill) trading for a PC, PoPB or PoPC participants for which their firm in the direct credit parent firm. Kill Switch can be implemented at the following levels:

- Activation of Kill switch on a PC GFID - PC firm that has Kill Switch enabled for it will have all working orders canceled and may not enter new orders
- Activation of Kill switch on a PoPB GFID - all Prime of Prime Customer trading firms for whom their direct credit parent PoPB has Kill Switch enabled for it will have all of their working orders canceled and may not enter new orders
- Activation of Kill switch on a PoPC GFIDs - PoPC firm that has Kill Switch enabled for it will have all working orders canceled and may not enter new orders

The [EBS Risk Management API](#) supports Kill (and Unkill) instructions for a PC, PoPB or PoPC. When a firm is Unkilled, order entry and trading may resume subject to the normal credit limits.

Credit-Screened Market Data

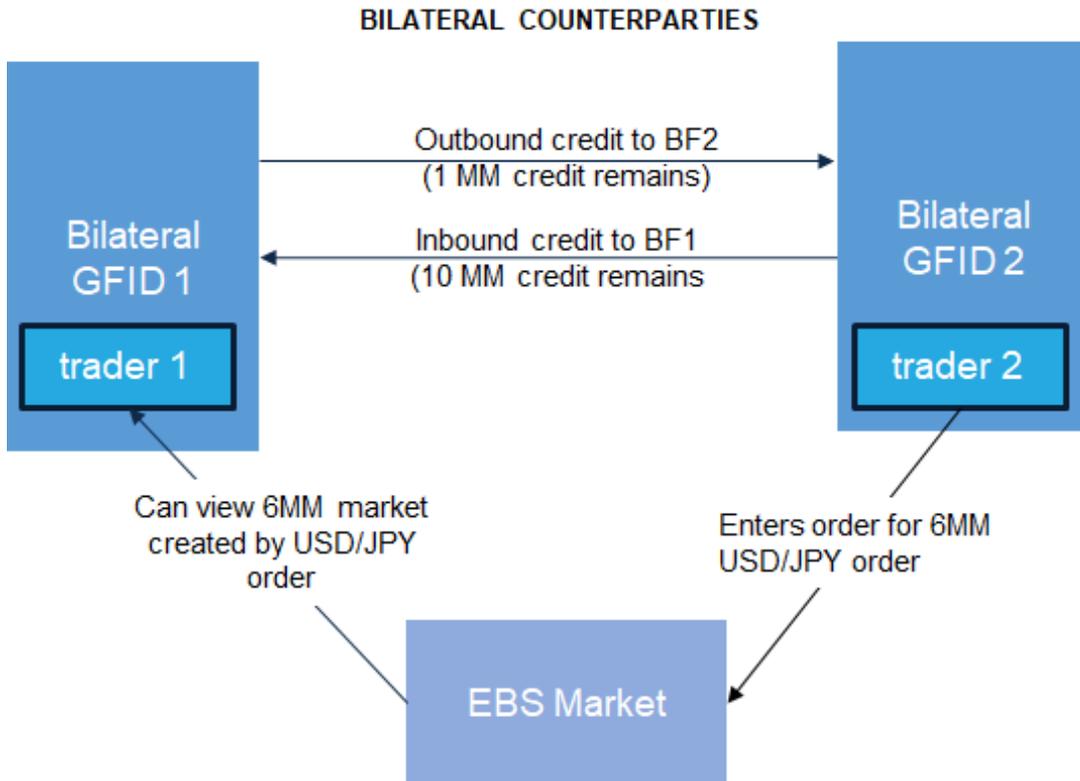
EBS Market on CME Globex is a bilateral market that requires credit availability, therefore, market data will be credit-screened for each market participant to ensure that the displayed market data is tradable (credit-screened market data). A market data subscriber will only see bids and offers from counterparties with whom they have a credit relationship and available credit. In addition to credit-screened market data, participants will see the best bid/offer on the book, which they will only be able to trade against if they have a credit relationship (and available credit) with the entity making the best bid/offer.

CME Globex will determine whether credit is available with market participant creating the market data based on the bilateral credit availability to trade a minimum quantity of the displayed market as follows:

- **Bilateral GFID**
 - Has bilateral credit remaining if there is sufficient inbound and outbound credit with the counterparty generating the market data to trade a minimum amount of the determined currency pair.
 - If credit is available, the full traded quantity in the market data will be displayed; if the full traded quantity is not available, only the quantity that is within the available credit between the matching counterparties will be displayed and is tradeable.
- **Prime Broker GFID**

- Has bilateral credit remaining if the PB's Prime Parent has sufficient inbound credit from the market counterparty generating the market data and the market counter party has sufficient inbound credit extended to it from the Prime Broker to trade a minimum quantity of the determined currency pair.
- If credit is available, the full traded quantity in the market data will be displayed; if the full traded quantity is not available, only the quantity that is within the available credit will be displayed and is tradeable.

Prime Customer can view the markets that are displayed to their credit parent regardless of the status of their available prime credit with their parent GFID. Market data is not screened by prime credit availability for EBS market.



Alerts

Using the Risk Management GUI, the EBS Risk Management administrator will have the ability to configure pre-set threshold levels (for example, at 80%), based on which, the dashboard will publish alerts for limits and threshold breaches in near real-time.

Listed are specifications of [EBS Reject Codes](#) and the accompanying text in tag 58-Text sent in reject responses to inbound iLink 3 messages.

For details on the EBS Credit limit monitoring interface alerts, please refer to this [User Help System](#).

Critical Alerts

Critical alerts are generated when a customer's credit utilization reaches 98% of limit value or is unable to trade 1 lot of the most expensive currency pair (determined by Conversion Rates).

Threshold Alerts

Threshold alerts are generated when customer's credit utilization reaches configurable threshold of limit value (e.g. 75%).

Using the Risk Management GUI, the EBS Risk Management administrator will have the ability to configure pre-set threshold levels (for example, at 75%). The dashboard will publish alerts when pre-set threshold limits are reached and when a credit limit has been fully utilized (has less than the minimum amount required to trade).