

BRIEFING ON GLOBEX FUNCTIONALITIES

TRADING PHASES

All BMD Products trade each day through a series of “Trading States”:

Seq	Market State	Actions/Activities	Notes
1	Pre-Open	New Order Entry, Modifies, Cancels	Market orders not allowed
2	No Cancel	New order entry	No modifies or cancels
3	Trading	Continuous Matching	
4	Intra Day Pause	Cancel Only	
5	Intra Day Pre-Open	New Order Entry, Modifies, Cancels	Market orders not allowed. Session orders from morning trading period remain.
6	No cancel	New order entry	No modifies or cancels
7	Trading	All functions	
8	Market Close & Surveillance Period	Order Cancellation	Customer order cancellation. At end, session and expired GTD Orders are cancelled

BMD Products use a standard duration for each Trading State:

Seq	Market State	Duration	Notes
1	Pre-Open	30 Minutes	
2	No Cancel	30 seconds	Last 30 seconds of the Pre-Open
3	Trading	Varies by Product	
4	Intra Day Pause	Varies by Product	
5	Intra Day Pre-Open	30 Minutes	
6	No cancel	30 seconds	Last 30 seconds of the Pre-Open
7	Trading	Varies by Product	
8	Market Close & Surveillance Period	15 Minutes	

BMD Products on Globex trade according to the following schedule (in Malaysian Time):

Seq	Market State	FKLI OKLI SSFs	FKB3 FMG3 FMG5 FMGA	FCPO FUPO	FPKO
1	Pre-Open	08:15:00	08:30:00	10:00:00	10:00:00
2	No Cancel	08:44:30	08:59:30	10:29:30	10:29:30
3	Trading	08:45:00	09:00:00	10:30:00	10:30:00
4	Intra Day Pause	12:45:00	12:30:00	12:30:00	12:30:00
5	Intra Day Pre-Open	14:00:00	14:00:00	14:30:00	14:30:00
6	No Cancel	14:29:30	14:29:30	14:59:30	14:59:30
7	Trading	14:30:00	14:30:00	15:00:00	15:00:00
8	Market Close / Surveillance	17:15:00	17:00:00	18:00:00	18:05:00
9	End Of Day	17:30:00	17:15:00	18:15:00	18:20:00

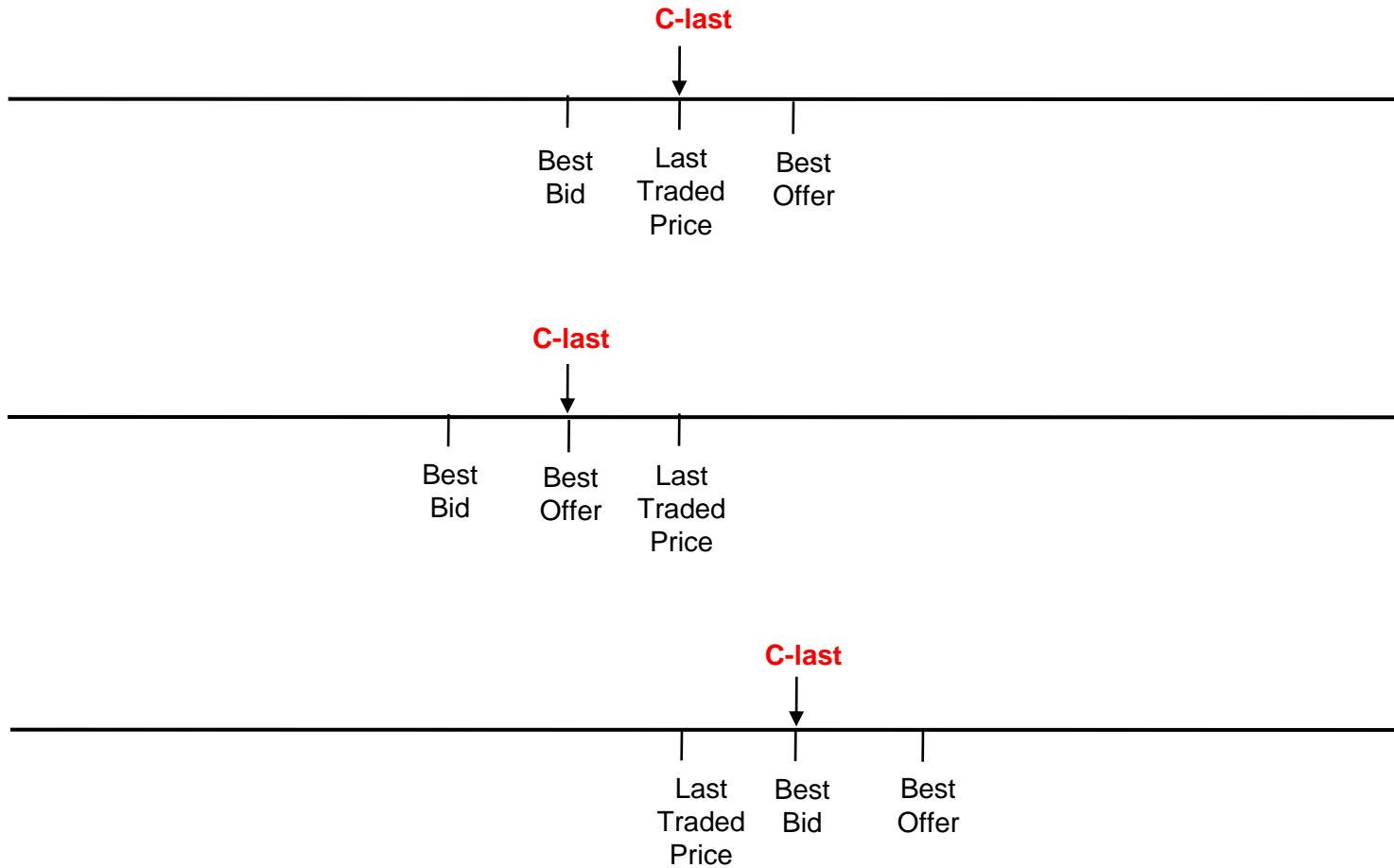
- The major changes in terms of the trading phases are:
 - Market orders not allowed in Pre-Open
 - Introduction of 30-second No-Cancel phase
 - Session orders will be valid for the entire trading day
 - No Pre-Closing
 - Order cancellations allowed during Surveillance phase after market close

MARKET INTEGRITY CONTROLS

- CME Globex Market Integrity Controls:
 - Price Banding
 - “With Protection” Orders
 - Stop Spike Logic
 - Price Limits
 - Maximum Quantity

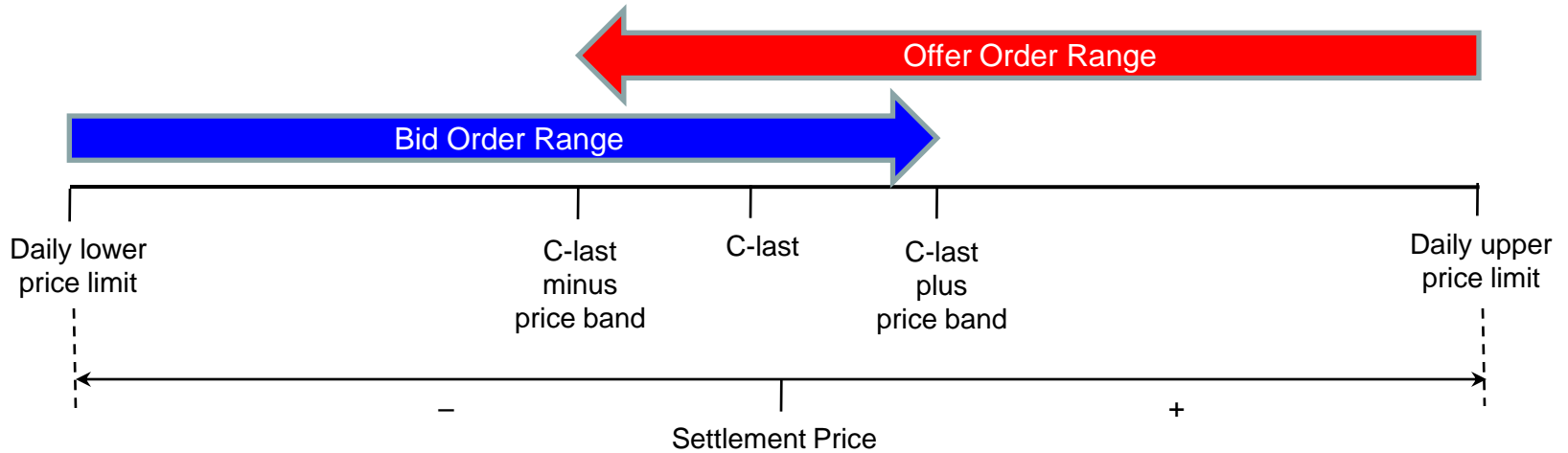
- Market Integrity Values are set by analyzing historical market activity, volatility and liquidity.
- They are designed to allow price discovery while limiting orders that may be errors.
- Implementing a new system with new functionality and new customers may change trading activity, therefore, the initial values are subject to change.

- To provide a more accurate picture of current market value, CME Globex implements C-last. C-last is designed to show the newest price of:
 - Settlement/Reference Price
 - Last Trade Price
 - A bid that is higher than the prior C-last
 - An offer that is lower than the prior C-last



Goal: To protect the market and traders from orders that are entered that would execute well above or below the market (C-last):

- **Examines all incoming price-based orders before acceptance on the system**
- **All orders with clearly erroneous prices are rejected i.e. limit bids at prices well above the market and limit offers at prices well below the market**
- **The price band variation is a predefined static value symmetrically applied to the C-last price at both the upside (for bids) and downside (for offers) levels. The C-last price can either be the last transacted price, best bid or offer through the last transaction or previous day's settlement price if no other prices are available**
- **Does not prevent traders from entering bids below the market or entering offers above the market**



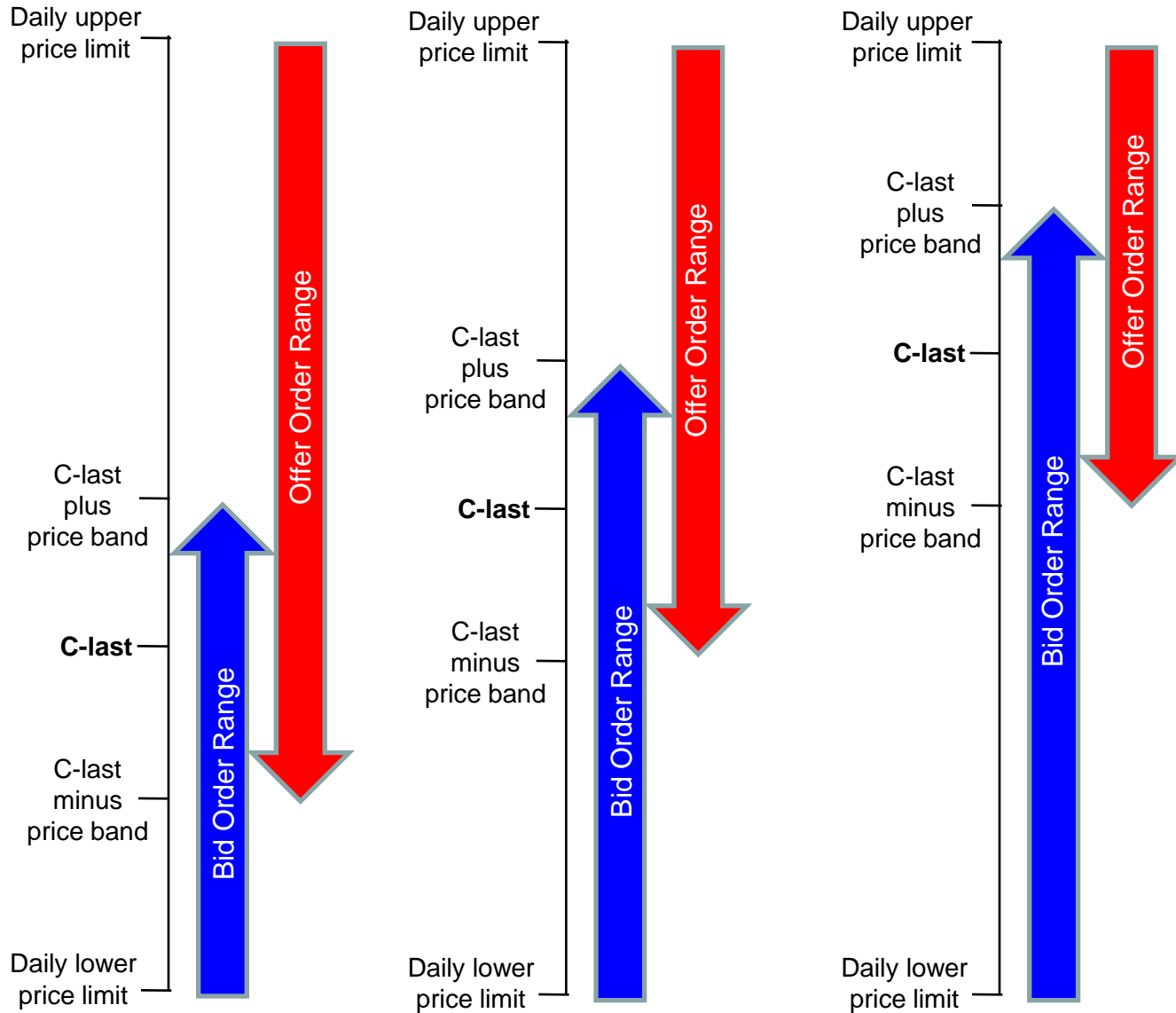
Example:

Price band = 80
 C-last = \$1200

Highest bid allowed = \$1200 + 80
 = \$1280

Lowest offer allowed = \$1200 – 80
 = \$1120

MOVING THE C-LAST



PROTECTION POINTS CONCEPTS

- A mechanism to allow a trader to enter an order to execute within a specified number of price levels
- A sort of dynamic limit price i.e. it floats around the best bid/offer
- Applies only for CME Globex “with protection” Stop and Market orders

Order Type	Protected Matching Range
Buy Market	Best Offer + Protection Points
Sell Market	Best Bid – Protection Points
Buy Stop	Trigger Price + Protection Points
Sell Stop	Trigger Price – Protection Points

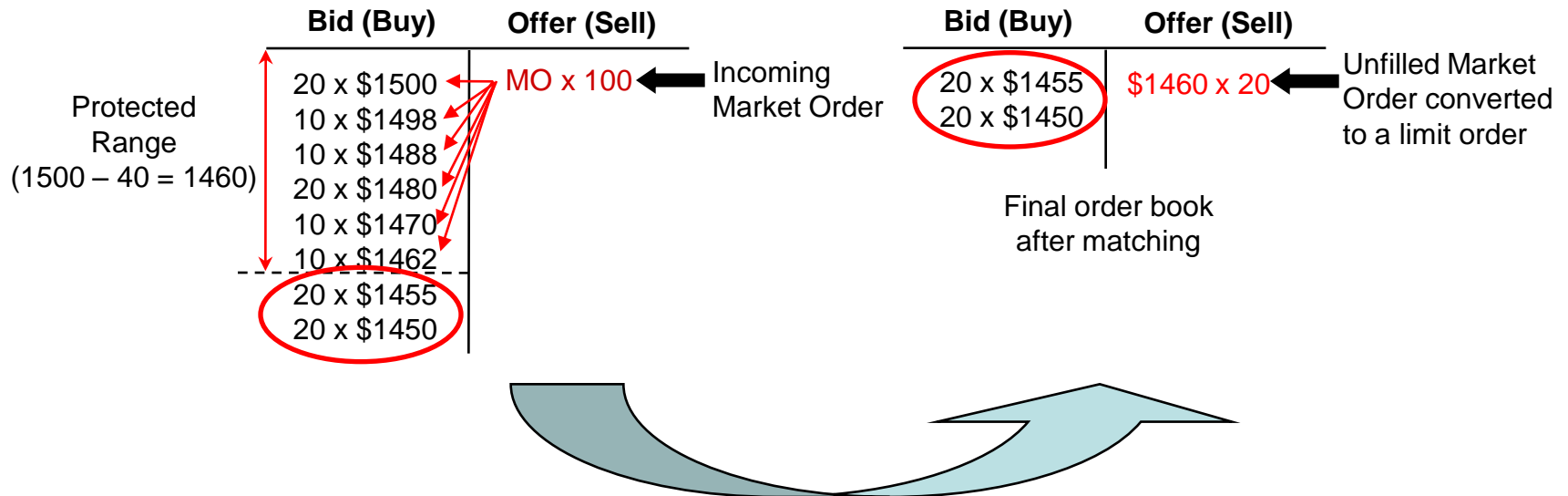
- Currently, BMD Market Orders:
 - Are entered without specifying a price
 - Will match its quantity to the fullest extent possible regardless of the match price

GLOBEX MARKET WITH PROTECTION ORDERS

- Market with Protection orders are matched at the best available price level without exceeding the protection price limit
- For bid orders, predefined protection points are added to the current best offer price to calculate the protection price limit. For offer orders, protection points are subtracted from the current best bid price
- If the entire order cannot be filled within the protected range immediately, the unfilled quantity remains in the order book as a limit order at the limit of the protected range

Example:

Protection Points = 40



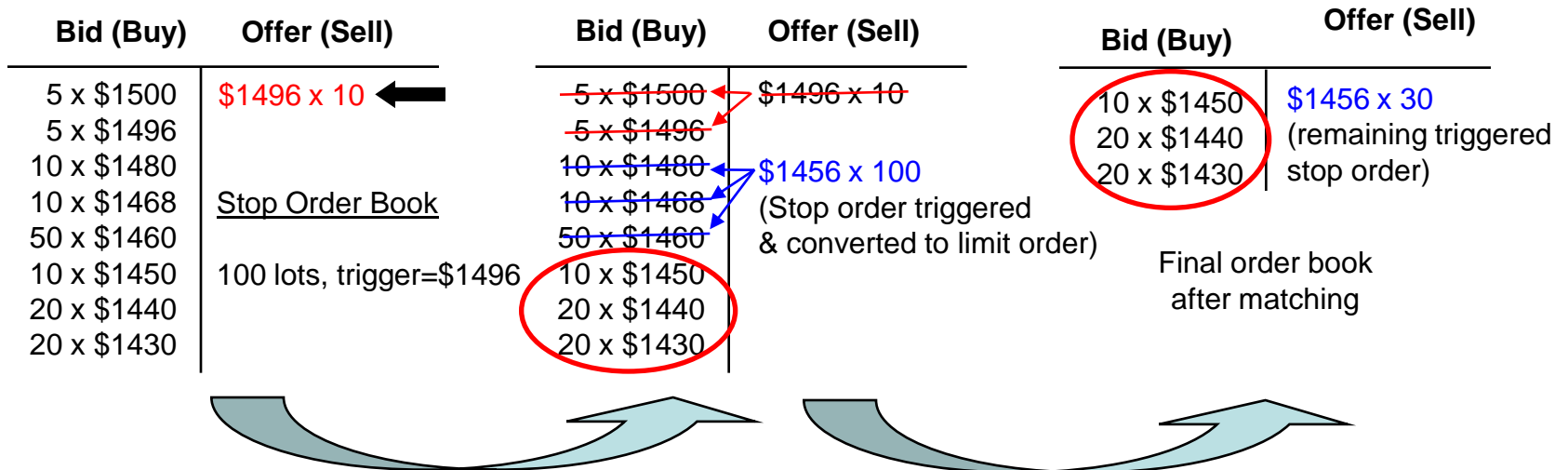
- Current BMD Stop orders:
 - Are entered with a trigger price
 - When entered the order remains in the stop order book until its trigger price is reached (traded)
 - When a trade occurs at the trigger price, the stop order enters the normal order book as a Market Order

GLOBEX STOP WITH PROTECTION ORDERS

- When a Stop with Protection order is triggered, the order enters the order book as a limit order equal to the trigger price plus or minus the predefined protection points range
- In the following example, when the stop order is triggered, it enters the normal order book as a limit order at the price of \$1496 (trigger price) – 100 (protection points) = \$1456

Example:

Protection Points = 40



USING “WITH PROTECTION” ORDERS

- At launch, Protection Point values are set for BMD products at 50% of the banding value.
- This value exceeds extremes found in market and stop price historical execution and should not restrict true price discovery.
- For market with protection orders, if the quantity desired does not exist within the protected range, the trader can:
 - Submit multiple “with protection” orders in succession.
 - Utilize a limit order with an explicit limit up to/ down to the banding value.
- For stop with protection orders, if the anticipated quantity may not exist within the protected range when the stop is triggered, a stop limit order may be used

- **Stop Spike Logic prevents cascading Stop Orders to be triggered causing excessive, improper price movements.**
- **When the logic detects that the initial triggered stops would cause the market to trade outside the predefined values (typically the same as the “No-Bust” ranges), the market is placed in a Reserved State for 2 minutes**
- **This momentary trading pause allows the users the opportunity to enter, modify or cancel orders**
- **The behavior of the Reserved State is the same as the Pre-Opening phase where an Indicative Opening Price is dynamically calculated based on the available orders in the book**
- **This provides the ability to re-establish the proper market prices**

STOP SPIKE LOGIC EXAMPLE

Example:

Stop Spike Logic trigger = 100
Protection Points = 40

- The triggering point of the Stop Spike Logic is calculated from the last limit match before the 1st stop order is triggered, in this case 1496

Bid (Buy)	Offer (Sell)	Bid (Buy)	Offer (Sell)	Bid (Buy)	Offer (Sell)
5 x \$1500	\$1496 x 10 ←	5 x \$1500	\$1496 x 10	20 x \$1390	\$1376 x 10 (remaining triggered Stop order)
5 x \$1496		5 x \$1496		20 x \$1370	
10 x \$1480		10 x \$1480	\$1456 x 50		Market Reserved For 2 mins
10 x \$1468	<u>Stop Order Book</u>	10 x \$1468	(Stop order triggered & converted to limit order)		
30 x \$1456		30 x \$1456			
10 x \$1448	50 lots, trigger=\$1496	10 x \$1448	\$1416 x 50		
20 x \$1430	50 lots, trigger=\$1456	20 x \$1430	(Stop order triggered & converted to limit order)		
20 x \$1416	20 lots, trigger=\$1416	20 x \$1416			
10 x \$1410		10 x \$1410	\$1376 x 20		
20 x \$1390		20 x \$1390	(Stop order triggered & converted to limit order)		
20 x \$1370		20 x \$1380			



Values for BMD Products on CME Globex at launch:

	Maximum Quantity	Banding	Protection Points	Stop Spike range	No Bust Range
FKLI	500	+/- 80 ticks	+/- 40 ticks	+/- 100 ticks	+/- 100 ticks
FCPO	500	+/- 80 ticks	+/- 40 ticks	+/- 100 ticks	+/- 100 ticks
FPKO	500	+/- 80 ticks	+/- 40 ticks	+/- 100 ticks	+/- 100 ticks
FUPO	500	+/- 96 ticks	+/- 48 ticks	+/- 120 ticks	+/- 120 ticks
FKB3	500	+/- 80 ticks	+/- 40 ticks	+/- 100 ticks	+/- 100 ticks
FMG3/5/A	500	+/- 80 ticks	+/- 40 ticks	+/- 100 ticks	+/- 100 ticks

THANK YOU