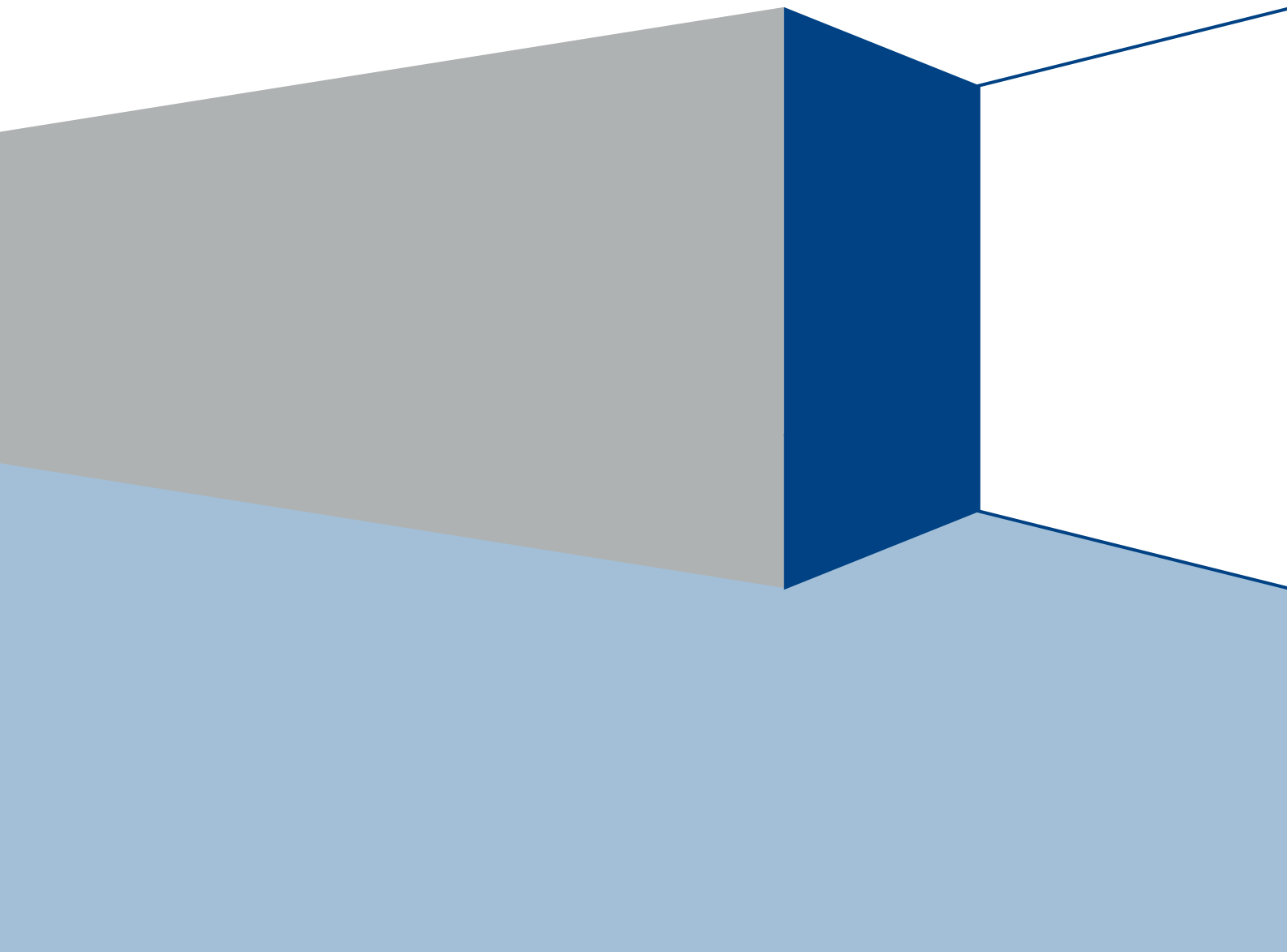




**London**  
Stock Exchange

SERVICE AND TECHNICAL DESCRIPTION

# Hidden Limit Orders, Hidden Pegged Orders and Minimum Execution Size



## Important note

This Service and Technical Description sets out the current position regarding the provision of hidden limit orders, hidden pegged orders and Minimum Execution Size by the London Stock Exchange, (the "Exchange"). This is a development project and could be subject to change.

This document has been produced by the Exchange to assist customers. While it has been prepared on the basis of the best information available, the Exchange accepts no liability for decisions taken, or systems work carried out by any party, based on this document.

This document does not form part of the Trading Services contractual documentation between the Exchange and its respective customers.

If you have any general queries relating to this document, please email the Client Technology Group on: [ctgroup@londonstockexchange.com](mailto:ctgroup@londonstockexchange.com)

Further copies of this document can also be downloaded from the Exchange's website at [www.londonstockexchange.com](http://www.londonstockexchange.com)

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Glossary of Terms	
ADT	Average daily turnover
BBO	Best bid and offer prices
CESR	Committee of European Securities Regulators
CDS	Customer Development Service
FIX 5.0 Interface	The Exchange's new interface providing FIX 5.0 connectivity to TradElect
IOB	International Order Book - the London Stock Exchange's electronic trading service for the trading of international securities via depositary receipts
ITBB	International Bulletin Board - the London Stock Exchange's electronic trading service for the trading of international equities
LOT	Large Order Threshold
Native Interface	The Exchange's proprietary interface providing connectivity to TradElect
Order Books	Automatic execution services operated by the London Stock Exchange - for the purposes of this document, order books refers to SETS, IOB and ITBB
SETS	The London Stock Exchange's electronic trading service for the trading of securities in the FTSE All Share Index, Exchange Traded Funds, Exchange Traded Commodities and liquid AIM and Irish Securities
TradElect	The London Stock Exchange's trading system
Trader Group	The level of customer segmentation at which authorisation and/or role enablement for trading actions in a particular market segment is performed

For further details on TradElect please refer to the *Guide to TradElect* available on the Exchange's website.

# 1. Introduction

As part of the Exchange's commitment to providing customers with world-leading execution services, we continue to develop a programme of functional enhancements to TradElect.

The next phase of these enhancements consists of:

- Hidden limit orders
- Hidden pegged orders- best bid, best offer and mid-price pegs
- Minimum Execution Size (MES)
- FIX 5.0 Interface to TradElect

This document outlines details of hidden limit orders, hidden pegged orders and MES. For details of the FIX 5.0 Interface please refer to the *Guide to the FIX 5.0 Interface for TradElect*.

## 1.1 Scope of Changes

All the new functionality, including the new FIX 5.0 Interface, is optional. The FIX 5.0 Interface enables best bid and best offer pegs.

**Table 1: Interface Availability**

The table below presents an overview of order functionality and its availability by interface.

	<i>Hidden Mid-Price Pegs</i>	<i>Hidden Best Bid and Offer Pegs</i>	<i>Hidden Limit orders</i>	<i>Minimum Execution Size</i>
<i>Native Interface</i>	Y	N	Y	Y
<i>FIX 5.0 Interface</i>	Y	Y	Y	Y

Customers opting to use mid-price pegged orders and MES via the Native Interface will need to make a number of small technical changes which are set out in the Technical Section of this guide. For details of FIX 5.0 connectivity please refer to the *Guide to the FIX 5.0 Interface for TradElect*. The Exchange does not envisage any changes to the *Rules of the London Stock Exchange* as a result of these enhancements.

### 1.1.1 Member Authorised Connection

For Member Authorised Connection (MAC), the authorising member firm and their client must use the same interface to TradElect. Participants who wish to connect via MAC will only be able to use the FIX 5.0 Interface if their authorising member firm supports FIX 5.0 connectivity. To connect via the Native Interface both user and member firm must support the Native Interface.

## 1.2 Readership

This *Service and Technical Description* includes:

- An overview of hidden limit orders
- An overview of the features and benefits of hidden pegged orders and Minimum Execution Size
- A description of how the new functionality will operate
- A technical description of the functional changes

This document is particularly relevant to trading and technical staff at Exchange member firms and other market participants interested in trading on the Exchange's markets.

## 1.3 Related Documentation

This document contains references to the *Guide to the FIX 5.0 Interface for TradElect*, which is available on the Exchange's website:

- Guide to the FIX 5.0 Interface for TradElect:  
<http://www.londonstockexchange.com/information-providers/technical-library/technical-specifications/technical-specifications.htm>

Other related documents are available on the Exchange's website:

- TradElect Parameters document:  
<http://www.londonstockexchange.com/traders-and-brokers/products-services/trading-services/trading-services.htm>

This is a live document which is updated as necessary.

## 1.4 Enquiries and Comments

Enquiries can be directed to your Primary or Technical account manager. Alternatively please contact Client Technology Services on:  
[ctgroup@londonstockexchange.com](mailto:ctgroup@londonstockexchange.com)

## 2. Project Implementation

### 2.1 Key Milestones

Indicative dates for key milestones and documents are shown below. All documents are available on the Exchange's website.

The launch of the order book enhancements is planned for November 2009. Dates may be subject to change and will be confirmed via a service announcement.

Timetable	
February 2009	Exchange Service and Technical Description for Hidden Pegged orders and Minimum Execution Size, and The Guide to the FIX 5.0 Interface for TradeElect issued
July 2009	Exchange Service and Technical Description update (this document) issued
7 <sup>th</sup> September 2009	TradeElect Customer Development Service and Conformance Test Service available, enabling customers to test order entry and trade execution for new order types
December 2009	Expected Go Live

## 3. Service Overview

### 3.1 Overview of Hidden Limit Orders

Hidden limit orders allow participants to enter limit orders on to the order book without displaying either price or volume to other participants. Hidden orders are able to interact with both displayed orders and other hidden orders on the order book.

### 3.2 Overview of Hidden Pegged Orders and Minimum Execution Size

This development allows participants to peg their hidden orders to one of the following reference prices:

- Best bid
- Best offer
- Mid price

The pegged order will track the reference price as it moves. A participant will also be able to peg their order at a differential to the best bid or best offer. Mid-price orders will track the true mid price of the security.

The Exchange will also be introducing a new order attribute, Minimum Execution Size (MES). Available to non-displayed orders only, the MES stipulates the minimum aggregate volume against which the order can be executed in continuous trading. Orders entered with a MES will persist in a hidden state on the book and execute only when there is sufficient volume to satisfy the MES criterion.

The MES is an anti-gaming feature designed to protect participants from small volume orders (“pinging”) which aim to discover the presence of hidden orders.

### 3.3 Large Order Threshold

Hidden orders can only be entered where the consideration at the point of entry is equal to or above the Large Order Threshold (LOT) in operation for that trading segment.

- For securities subject to the Markets in Financial Instruments Directive (MiFID) regulations, hidden orders are only permitted where the order consideration meets the “Large in Scale” qualification as per Article 20 of the MiFID pre-trade Implementing (“Level 2”) Regulation. Large in

scale values are calculated by CESR in Euros (€) with reference to a security's Average Daily Turnover (ADT)

- For securities not subject to MiFID regulations the Exchange will apply its own Large Order Threshold

The *TradElect Parameters Document* will provide details of the LOT according to the trading segment, currency and ADT of that security. This document is available on the Exchange's website and is updated as necessary.

Hidden orders which do not meet the specified LOT consideration value upon entry or modification of the order will be rejected. Those hidden orders that do meet the necessary LOT will remain hidden after a partial fill even if the unexecuted quantity (the order stub) is below the threshold. If the order stub is modified, the order will be subject to LOT verification and will be rejected if it does not meet the required consideration value.

**Table 2: Order Type and Features/Functionality**

The table below lists order types and the order attributes that operate on them.

<i>Order type</i>	<i>Limit price</i>	<i>Anonymous</i>	<i>LOT</i>	<i>MES</i>	<i>Inc. in Indicative Uncrossing Price and Volume</i>	<i>Inc. in Displayed BBO</i>
<i>Limit Order</i>	<i>Y</i>	<i>Y</i>	<i>N</i>	<i>N</i>	<i>Y</i>	<i>Y</i>
<i>Market Order</i>	<i>N</i>	<i>Y</i>	<i>N</i>	<i>N</i>	<i>Y</i>	<i>Y</i>
<i>Iceberg Order</i>	<i>Y</i>	<i>Y</i>	<i>N</i>	<i>N</i>	<i>Y</i>	<i>Y</i>
<i>Named Order</i>	<i>Y</i>	<i>N</i>	<i>N</i>	<i>N</i>	<i>Y</i>	<i>Y</i>
<i>Hidden Limit Order</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>O</i>	<i>Y</i>	<i>N</i>
<i>Hidden Mid Peg</i>	<i>O</i>	<i>Y</i>	<i>Y</i>	<i>O</i>	<i>N/A</i>	<i>N</i>
<i>Hidden Bid Peg</i>	<i>O</i>	<i>Y</i>	<i>Y</i>	<i>O</i>	<i>N/A</i>	<i>N</i>
<i>Hidden Offer Peg</i>	<i>O</i>	<i>Y</i>	<i>Y</i>	<i>O</i>	<i>N/A</i>	<i>N</i>

Key

Y= Yes

N= No

N/A= Not Applicable

O=Optional

 FIX 5.0 only

 Native Interface and FIX 5.0

### 3.4 How Pegged Orders Work

- When entering a pegged order, participants must specify one reference price they wish to track - best bid, best offer or mid price
- Best bid and best offer pegs may track at a differential offset which is specified as a multiple of whole tick sizes
- The TradElect trading system will manage the pegged order by automatically modifying the pegged order's price on the order book as the reference price moves. Participants will not be notified of price updates to their pegged orders
- Mid-price orders may execute intra-tick. *For example, if the security is at a one tick spread, then a mid-price execution will be at a half tick.* This applies to the execution of orders only and when submitting any limit order, the price must still be a multiple of the tick size
- All pegged orders will be deleted at the end of the trading day, and participants shall receive notification when this occurs. Pegged orders are always non-display orders; therefore there will be no market notification of pegged orders. However trade reports arising from executions will be sent out as normal via Infolect

#### 3.4.1 Hard Limits

Customers will be able to set an optional limit price on their pegged order (referred to as a "hard limit"). If the reference price of the order reaches this price, the order will effectively become a hidden limit order and reside on the order book at the limit price. The order may then execute at the hard limit price, or, if and when the reference price moves back within the limit threshold become a pegged order once more. Participants will not be sent a message to notify them their pegged order has reached its hard limit.

It is not possible for participants to modify the hard limit on their order once it has been entered.

#### 3.4.2 Pegged Orders without Reference Price

Pegged orders that are entered when there is no best bid or best offer reference price will be parked on the order book, and injected once the reference prices are available. Pegged orders that are already on the order book when a reference price becomes unavailable will be parked, and re-injected once it returns. *For example, if there is only a best offer and no best bid, all pegged orders including best offer and mid pegs will be parked until the best bid price is available.* Parked orders are not available for

execution. Re-injected pegged orders are treated as newly entered orders and will therefore have a new time tag. They will however keep their priority in relation to other orders pegged to the same reference price.

Participants using the Native Interface will not be notified when a pegged order is parked owing to reference price availability, but will be notified if it is re-injected. Participants using the FIX 5.0 Interface will receive notification when a pegged order is parked or re-injected due to reference price availability.

### 3.4.3 Pegged Order Participation in Auctions

Pegged orders will not participate in auction periods. Pegged orders entered during the opening auction will be parked and automatically injected in the next period of continuous trading. During intra-day auctions, pegged orders already on the book will be parked and reinstated in the next period of continuous trading. All pegged orders will be deleted at the end of the day and therefore pegged orders entered during the closing auction will be automatically deleted.

Participants using the Native Interface will not receive notification each time a pegged order is parked owing to period changes, but will be notified if it is re-injected. Participants using the FIX 5.0 Interface will receive notification each time a pegged order is parked or re-injected due to period changes.

### 3.3.4 Pegging at a Differential

Best bid and best offer pegged orders can be pegged at a differential, expressed in tick size increments, to either the best bid or offer price. Peg differentials can only be expressed in whole tick sizes. Participants cannot peg at a differential to the mid price.

- To peg inside the bid participants peg to the bid, + (x) tick(s)
- To peg outside the bid participants peg to the bid, - (x) tick(s)
- To peg inside the offer participants peg to the offer, - (x) tick(s)
- To peg outside the offer participants peg to the offer, + (x) tick(s)

#### *Example: Price format code*

*Price format code W=1.00*

*If an order on a security with price format code W is pegged at -2 to the best offer and the best offer is 497, the pegged order will be priced at 495.*

If the security uses a dynamic tick size, the tick size on the differential will change with the price of the order (not the reference price). The tick size

first applied will be based on the reference price, but will be re-assessed for each single tick differential that is on the order. If the offset takes the price of the order over a tick size boundary the new tick size will be applied- even if the reference price remains within a different tick size boundary.

**Example: Dynamic Tick Size**

*In this example, the following tick size matrix is used:*

Price Range	Tick Size
0-10p	0.01
10p-200p	0.1
200p-500p	0.25

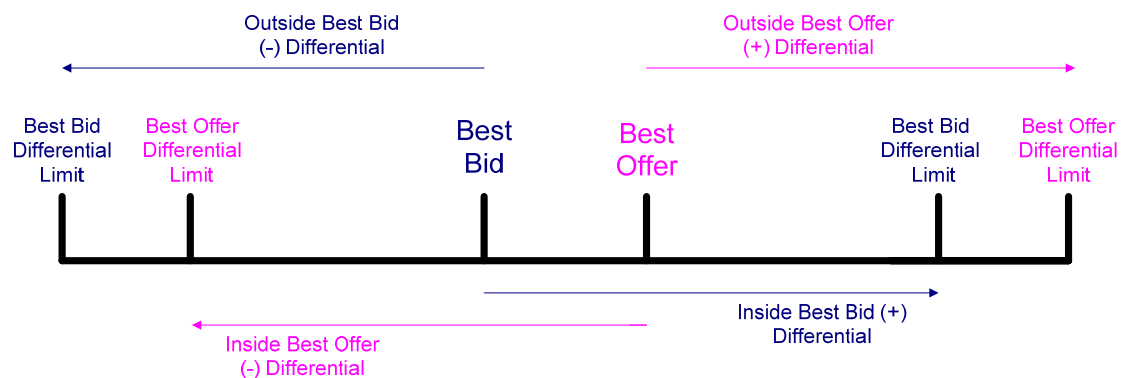
*If an order is pegged at +4 to the best bid, and the best bid is 9.98 this order will be priced as follows:*

- 1<sup>st</sup> tick offset = 9.98p + 0.01 = 9.99p (because 9.98p falls in the 0p - 10p range)
- 2<sup>nd</sup> tick offset = 9.99p + 0.01 = 10p (because 9.99p falls in the 0p - 10p range)
- 3<sup>rd</sup> tick offset = 10p + 0.1 = 10.1p (because 10p falls in the 10p -200p range)
- 4<sup>th</sup> tick offset = 10.1p + 0.1 = 10.2p (because 10.1p falls in the 10p - 200p range)

*Thus for an order pegged at a differential of +4 to the best bid, with the best bid at 9.98, the order will be priced at 10.20.*

The 'Inside best price peg differential limit' and the 'Outside best price peg differential limit' restrict the amount of ticks you may peg inside or outside a reference price, and are defined per security (where applicable).

This is represented in the diagram below:



Details of the differential limits and defaults can be found in the *TradElect Parameters document*. All pegged orders will have their differential

validated against the inside and outside best price peg differential limit upon entry, to ensure it is within the acceptable range.

*Example: Hidden order pegged to the best bid at a differential is re-priced and fully executes against a visible limit order*

*1) Enter order: Hidden buy Order C is entered, pegged to the best bid at a differential of +5. The best bid is currently 1315, and since the tick size is 1p, Order C is priced at 1320. No executions occur at this point. Note how although Order C is now priced at 1320 the visible best bid remains at 1315.*

BUY		SELL							
Number of buy orders at best price	Volume at best bid price	Grey shading indicates the order is hidden	Best Bid	Best Offer	Volume at best offer price	Number of sell orders at best price			
1	5,000		1315	1325	70,500	1			
	Time	Volume	MES	Price/Peg	Price/Peg	MES	Volume	Time	
Order C	10:30	10,000	-	Best Bid Peg +5=1320	1325	-	70,500	10:24	Order B
Order A	10:22	5,000	-	1315					

*2) Enter order and update: Visible buy Order D is then entered with a price of 1320 and forms the best bid. Order C's price is changed to 1325*

BUY				SELL					
1		5000		1320	1325		70,500		1
	Time	Volume	MES	Price/Peg	Price/Peg	MES	Volume	Time	
Order C	10:30	10,000	-	Best Bid Peg +5=1325	1325	-	70,500	10:24	Order B
Order D	10:31	5,000	-	1320					
Order A	10:22	5,000	-	1315					

*3) Execution result: The book is now crossed, so Order C can execute fully against Order B. The resulting BBO remains unchanged as Order B has only been partially filled.*

BUY					SELL				
1		5,000		1320	1325		60,500		1
	Time	Volume	MES	Price/Peg	Price/Peg	MES	Volume	Time	
Order D	10:31	5,000	-	1320	1325	-	60,500	10:24	Order B
Order A	10:22	5,000	-	1315					

### 3.5 Price Calculation

Hidden orders will not be included in the calculation of the published best bid and offer (BBO) or mid price; these will be derived purely from visible orders. Customers should note that the published mid price is rounded up to the nearest whole tick size whereas hidden mid-price orders track the mathematical mid price with no rounding to the nearest whole tick size.

As hidden pegged orders are parked during auctions they will not be included in the calculation of indicative uncrossing price and volume messages during auction call periods.

### 3.6 How MES Works

MES is an optional order attribute available only on hidden orders. Customers using MES will set the minimum volume at which they want their order to execute; no executions will take place unless this volume can be matched in full. If utilised, the MES entered must be greater than zero and a multiple of the lot size of the security.

When sufficient volume is available to satisfy the MES, the order will execute. Any unexecuted volume will be re-assessed for MES application. If the order stub is below the specified MES, then the MES will be adjusted to the full size of the order stub. If the order stub is above the MES, then the unchanged MES will continue to apply to the order stub.

The MES can be satisfied by execution against more than one order and orders with MES on opposite sides of the book will have the ability to execute against one another.

### 3.6.1 MES in Auctions

MES will not be applied during auction periods. Hidden limit orders with MES can remain on the order book during an auction with the total volume of the hidden order contributing to the determination of the auction uncrossing price regardless of any MES constraints. For any order surplus after an auction, the MES constraint will be re-applied in the next period of continuous trading.

### 3.6.2 MES Modification

It is possible to amend the MES of a hidden order. If the MES is reduced in size it will not lose its time priority. However, if the MES is increased then the order will lose its time priority.

If the MES (or any other feature of the order) is modified when the remaining order stub does not meet the LOT for that security, the order cannot remain hidden and will therefore be rejected for failing to meet the specified LOT value for the security.

### 3.7 Order Types and Validity Types

The table below illustrates validity types that can be specified upon entry of a hidden order type or order with MES. Orders entered with validity types that cannot be allowed on that order type will be rejected. Note that all pegged orders will be deleted at the end of the trading day.

	<i>Fill or Kill</i>	<i>Execute and Eliminate</i>	<i>Good Till Cancel</i>	<i>Good Till Time</i>	<i>At The Close</i>	<i>At The Open</i>	<i>Good For Auction</i>	<i>Good For Day</i>	<i>Good For Intraday Auction</i>
<i>Hidden Mid-Price Pegs</i>	Y	Y	Y	Y	N	N	N	N	N
<i>Hidden Best Bid and Offer Pegs</i>	Y	Y	Y	Y	N	N	N	N	N
<i>Hidden Limit</i>	Y	Y	Y	Y	Y	Y	Y	Y	Y
<i>MES</i>	N	N	Y	Y	<i>If on a hidden limit</i>	<i>If on a hidden limit</i>	<i>If on a hidden limit</i>	<i>If on a hidden limit</i>	<i>If on a hidden limit</i>

### 3.8 Changes to the Continuous Trading Execution Algorithm

The manner in which TradElect currently matches orders in continuous trading will change to support the new order functionality described in this document - TradElect will use two different price determination mechanisms depending on the event and the state of the order book.

Currently TradElect uses 'passive price determination' to establish the price at which two orders execute - the execution price is set by the price of the passive order. The introduction of hidden orders with MES could result in circumstances where the passive price determination for an order with MES appears to have executed outside the BBO. In these circumstances, additional logic will be applied to ensure executions do not occur outside the visible BBO. The introduction of pegging functionality can result in circumstances where multiple order updates can occur simultaneously and an alternative method of determining execution price is required. This alternative method will be a continuous trading uncrossing algorithm.

As a result, the matching process will now run in the following manner:

- Step 1: Trigger Event- the matching process is triggered by an order event - the entry, deletion or modification of an order - that will require a change or changes to the order book. During the matching process the order book is locked until all updates and executions have completed.
- Step 2: Update Order Book- depending on the event that has caused the matching process, one or more orders may need to be updated. For example, in the event of an order entry which creates a new best bid price all orders pegged to the best bid and mid price will be updated. All updates to the order book, including parking, injection and re-pricing of orders are performed with execution disabled before execution is attempted.
- Step 3: Filter Order Book- the updates may result in a crossed order book indicating that executions could occur. Before any execution takes place the book is filtered for orders that should not be considered for execution - orders that cannot execute due to an MES constraint will be excluded at this point.
- Step 4: Matching- if after filtering the order book remains crossed, execution(s) will occur. Passive price determination will continue to be used where the order which triggered the matching process is the only order eligible for execution on that side of the book. A new continuous trading uncrossing algorithm will apply for price determination in all other scenarios.

If crossed orders with MES still exist after an iteration of the above process which has resulted in one or more executions, the filter and matching steps will subsequently be repeated - this is because the change to the order book resulting from the executions may release further crossed orders with MES to execute. The reiteration of the filter and matching steps will continue until no further executions occur. During each iteration of the filter and matching steps it is possible that different trade prices will be determined. However, no interim BBO will be determined nor will internal pegs be updated until all iterations are complete.

### 3.8.1 Passive Price Determination

In scenarios in which passive price determination is used, executions will occur as they do today. That is, the price of the passive order will determine the execution price. Currently, orders that execute outside the initial BBO will create a new resultant BBO.

However, following the introduction of MES, existing passive price determination involving hidden passive orders with a MES could result in a determined execution price outside the visible BBO without a new resultant BBO being created. In order to bind executions to within the visible BBO, additional logic will be applied in scenarios where the resulting trade price would be at or outside the BBO.

- If the determined price is equal to or outside (i.e. lower than) the resultant visible best bid, the price will be adjusted to be the best bid plus half a tick
- If the determined price is equal to or outside (i.e. higher than) the resultant visible best offer, the price will be adjusted to be the best offer minus half a tick

**Example: Passive Price Determination with limit outside BBO**

In this example Orders A and C are crossed but can not execute because Order A does not satisfy the MES on Order C. Order D - which is better priced than Order A - is the incoming order and executes against Order C which is resident on the book. The determined passive price of 140 is not within the visible BBO because it is outside the best bid. Assuming the tick size on this security is 1p, the price would be determined to 146.5p, inside the best bid, and execution would occur at 146.5.

BUY					SELL				
1		1,000		146	150		1,000		1
	Time	Volume	MES	Price/Peg	Price/Peg	MES	Volume	Time	
Order D	12:34	2,000	2,000	148	140	2,000	2,000	12:33	Order C
Order A	12:30	1,000	-	146	150	-	1,000	12:32	Order B

**Execution Result:** Orders D and C have executed fully within the BBO and are removed from the book. The BBO remains unchanged.

BUY					SELL				
1		1,000		146	150		1,000		1
	Time	Volume	MES	Price/Peg	Price/Peg	MES	Volume	Time	
Order A	12:30	1,000	-	146	150	-	1,000	12:32	Order B

**3.8.2 Continuous Trading Uncrossing Algorithm**

In circumstances where more than one order on the side of the book that triggered the matching can execute, the new continuous trading uncrossing algorithm will apply and the price will be determined in the following manner.

First the algorithm will determine a target execution price. This will be:

- The visible true mid price on the book (prior to the trigger event).
- If there is no visible mid because the BBO is incomplete the target price will be half a tick inside the available price. *For example, if there is a visible bid but no offer, the target price will be at best bid price + (0.5) ticks. If there is a visible offer but no bid, the target price will be at best offer price - (0.5) ticks.*

- If there is no bid or offer a reference price will be used. If the security has traded that day this will be the last traded price. If the security has not traded that day the dynamic base price will be used

Second, the algorithm will determine whether or not the target price is within the range of prices which maximise executable volume. If the target price is a price which maximises executable volume then the target price will be the trade price. If not, the trade price will be the closest price to the target price within the range of prices which maximise executable volume.

- If the target price is higher than the highest price that maximises executable volume then the trade price will be the highest price which maximises executable volume
- If the target price is lower than the lowest price which maximises executable volume then the trade price will be the lowest price which maximises executable volume

**Example: Continuous trading uncrossing**

*In this scenario continuous trading uncrossing will be used to determine the price at which orders C, D and E will execute. This is because there is more than one order on the side of the incoming order (Order E) which can execute.*

BUY					SELL				
1		1,000		140	150		1,000		1
	Time	Volume	MES	Price/Peg	Price/Peg	MES	Volume	Time	
Order E	08:35	1500	-	145	141	1,000	2,000	08:33	Order C
Order D	08:34	500	-	142	150	-	1,000	08:32	Order B
Order A	08:31	1000	-	140					

*As there is a visible mid, the target price is the mid price of 145. However the target price is higher than the price which maximises executable volume. In this case the range which maximises executable volume is 141-142. Therefore the trade price is 142, the highest price which maximises executable volume closest to the target price.*

*Execution Result: Orders C, D and E have all been fully executed, and are removed from the book. The visible BBO remains unchanged.*

BUY					SELL				
1		1,000		140	150		1,000		1
	Time	Volume	MES	Price/Peg	Price/Peg	MES	Volume	Time	
Order A	08:31	1,000	-	140	150	-	1,000	08:32	Order B

### 3.8.3 Execution Priority

Visible orders at any particular limit price will have priority over any hidden orders at the same price. This is in order to reflect the contribution of visible orders to price formation, which is to the benefit of the market as a whole. Within each class of visibility, time priority will be retained. The priority of execution in continuous trading will therefore be:

Price - Visibility - Time

Pegged orders will be assigned a new time stamp upon an automatic price refresh. However, they will retain their time priority relative to other orders pegged to the same reference price.

Where orders with MES are present, the filter algorithm will adhere to this priority of execution. In certain scenarios this could mean that orders with MES which may be crossed do not execute owing to higher priority orders. This is because higher priority orders must be executed first, even if the higher priority orders cannot satisfy the MES of the incoming order. An order with MES- being subject to an additional constraint- may take longer to execute than other orders at the same price. If the MES on a resident order cannot be met, the order is considered ineligible for execution and will be filtered out of the matching process allowing higher and lower priority orders to fill the incoming order.

### 3.8.4 Hidden Limit, Iceberg and MES Priority

Price/Visibility/Time priority applies to all order types. Consequently iceberg orders will have priority over hidden orders because they have a higher level of visibility. The total volume of an iceberg order will always execute before a hidden order at the same price.

Displayed limit orders at the same price as an order with MES will always execute before an order with MES as MES orders must be expressed as hidden.

### 3.9 Tariff for Hidden Limit Orders, Hidden Pegged Orders and MES

The tariff for hidden limit order executions, hidden pegged order executions and MES usage will be provided ahead of implementation.

## 4. Technical Changes

This section covers the technical details relating to the functionality described within the Service Description of this document, namely hidden limit orders, hidden pegged orders and MES. It includes the information required to develop to and implement the changes and will cover the specific format of the current Native Interface. Where the functionality is available by using the new FIX 5.0 Interface customers should refer to a separate *Guide to the FIX 5.0 Interface for TradElect*.

### Technical Changes Summary

#### Native Interface

- New Market Mechanism type- HL (hidden limit order)
- New Market Mechanism type - MP (hidden mid-price pegged order)
- New Advisory codes
- Order Entry-5EO(AF)
- Acknowledge Order Details-5E3(AF)
- Modify Order -5MO(AD)
- Acknowledge Modify Order-5M6(AD)
- Own Order book Download-5RO(AC)
- First Order Book Download Response-5OF(AC)
- Subsequent Order Download Response-5S1(AC)

#### FIX 5.0 Interface

- New Interface

#### 4.1 Hidden Limit Orders

A new Market Mechanism Type of “HL” will be created to support hidden limit orders on the native interface.

#### 4.2 Hidden Pegged Orders

A new market mechanism type of “MP” will be created to support hidden mid price pegged orders on the native interface. Please see the Appendices at the end of this document for pegged order examples on both Native Interface and FIX 5.0 Interface.

## Pegged Order Deletion by the Exchange

All pegged orders will be deleted at the end of the trading day. Native Interface customers will receive unsolicited order deletion messages (5SO / 5D2) to the USAP for the trader group used to enter the order. FIX customers will receive a message to the CompID that entered/modified the order.

## Infolect Broadcast Messages

No hidden order details will be sent out to the market via Infolect, however order executions will be sent out to Infolect customers subscribing to that information. Infolect will update customers as per normal including updates to BBO and mid-price following executions involving hidden orders and orders with MES.

Customers using mid or BBO hidden pegged orders are advised to reference the Infolect 'Mid Price', 'Best Bid Price' or 'Best Offer Price' included within the Enhanced Best Price 5SF and Uncrossing Price and Volume 5UD.

## Reference Data

No Infolect reference data will be sent out in relation to any hidden or pegged orders (hidden limit, hidden mid peg or hidden BBO peg) or MES. Reference data will be available on the website in the future.

## Parking Orders

As explained in the Service Overview - pegged orders without Reference Price, a customer's order may be parked and then re-injected due to the availability of the reference price. Customers using the FIX 5.0 Interface only will be notified of this.

### 4.2.1 Hidden Mid-Price Pegged Orders

Native Interface - Hidden mid pegged orders are available via the Native Interface.

New Market Mechanism Type = MP

FIX 5.0 Interface- Hidden mid pegged orders are available via the FIX 5.0 Interface. Please refer to the *Guide to the FIX 5.0 Interface for Tradelect*

for details on Message Protocol, Format, Fields, Values and Download Services for this functionality.

## Price Format Code/Dynamic Tick Size

Customers entering orders including a price will be subject to Price Format Code and Dynamic Tick Size validation.

## Supported Messages Versions (Native Interface)

The existing message types and message versions listed in the table below will support the new "HL" and "MP" Market Mechanism Type for the entry and modification of hidden limit and hidden mid price pegged orders.

Message	Supported Version	Function
5EO	AD, AE, AF	Enter order message
5MO	AB, AC, AD	Modify order
5BO*	AA	Basket instruction for enter order
5BM#	AA	Basket instruction for modify order
5MF	AA	Modify client reference (Johannesburg Securities Exchange only)

- The 5BO\* message incorporates the AE version of the 5EO message string
- The 5BM# message incorporates the AC version of the 5MO message string.

The new market mechanism types can be accommodated in the existing message layouts so there are no functional changes to the Native Interface.

## Download Services

### Native Interface

Hidden limit and hidden mid price pegged orders will be included in an own order book download requested through the following order book message:

- 5RO Request Order Download (version AA and AB)

Hidden limit orders will be identified with the Market Mechanism Type = "HL". Hidden mid pegged orders will be identified with Market Mechanism Type = "MP".

#### 4.2.2 Hidden BBO Pegged Orders

Native Interface - Hidden BBO pegged orders are not available via the Native Interface.

FIX 5.0 Interface - Hidden BBO pegged orders are available via the FIX 5.0 Interface. Please refer to the *Guide to the FIX 5.0 Interface for TradElect* for details on Message Protocol, Format, Fields, Values and Download Services for this functionality.

#### 4.3 Minimum Execution Size (MES)

Native Interface - MES is an optional order attribute available via the Native Interface. Please see Appendix B for order example using MES on the Native Interface. This functionality is only available via the new Native message types. Please see Appendix C for further details.

FIX 5.0 Interface - MES is also available via the FIX 5.0 Interface. Please refer to the *Guide to the FIX 5.0 Interface for TradElect* for details on Message Protocol, Format, Fields and Values to use this functionality.

#### Aggressive/Passive Indicator

Any executing orders using the continuous trading uncrossing algorithm will result in both the buy and sell parties involved in the execution receiving their execution information with the Aggressive/Passive indicator set to 'U', for Auction.

Please note this will be possible during any 'Continuous Trading' period where MES is permitted and is a change to the existing protocol whereby an Aggressive/Passive indicator of 'U' for auction is only currently available during a specific auction period (Opening, Closing, Derivatives expiry EDSP and Volatility Automatic Execution Suspension auctions).

#### Infolect Broadcast Messages

No Infolect Broadcast messages (Reference Data, Trading or Trade Report messages) will be sent out specifically relating to MES.

#### 4.4 Order Validation

The new services described here are validated in the same way as existing messages, fields and values currently on TradElect. System rules ensure that only messages that pass validation progress onto the order book and include:

- Market Mechanism Type
- Validity Type

- Period Rules
- Segment Rules
- Peg Differential Limits
- MES
- Price Format/Tick Size

Please refer to the Appendices for the Reference data and other Parameters surrounding validation including Period Rules and Large Order Threshold (LOT) details.

Please note these codes may be returned in both the existing Native Interface and FIX 5.0 Interface. Customers may receive new or existing Application Advisory Codes whilst using this new functionality, please see below:

#### **New Application Advisory Codes**

- Q513I - Visible Pegged Order Not Allowed
- Q514I - Peg Differential is not within than the Allowed Peg Differential Limits
- Q515I - Peg Differential Not Allowed for Mid-Price Peg
- Q516I - Price Source Not Valid For Instrument
- Q517I - MES Not Permitted. E.g. On an order with a Validity Type of FOK.
- Q518I - Orders with MES Must Be Hidden
- Q519I - MES Cannot be Greater than Order Size
- Q560I - Order Consideration Below Threshold

#### **Existing Application Advisory Codes**

- Q002I - Period Authorisation Failed. All Pegged Orders will be validated at a Period level for certain set entry conditions, Market Mechanism Type and for a Validity Type of GTT, GTC, FOK or ENE upon entry.
- Q136I - Price Format Invalid. All Pegged Orders will be validated upon entry to ensure its Limit Price is tick size compliant.
- Q278I - Size/Consideration must be a multiple of Lot Size. The system will validate on entry that the MES specified on the hidden order is compliant with the lot size specified for the Instrument.

# 5. Testing

## 6.1 Conformance Requirements

Native Interface - Conformance testing is mandatory for all customers who wish to use the functionality unless they can demonstrate that no software changes are required in order to support these changes. Customers should contact their Technical Account Manager for more information if they are not sure if they are exempt from the conformance testing.

FIX 5.0 Interface - Customers planning to use the new FIX 5.0 Interface will be required to perform conformance and Customer Development Service (CDS) testing. Please refer to the *Guide to the FIX 5.0 Interface for TradElect* for further information.

## 6.2 Accreditation Policy

The Exchange strongly recommends that all customers who want to use the new services outlined within this document test the functionality on the CDS service. The Exchange's Accreditation policy mandates a conformance test for all customers who have to make code changes to their systems to support the changes to the Native Interface. For FIX 5.0 Interface testing access and requirements please refer to the *Guide to the FIX 5.0 Interface for TradElect*.

## 6.3 Customer Development Service

The CDS environment will be updated to allow customer testing. A service announcement will be sent out prior to the launch of the service on CDS confirming this date.

## Appendix A: Pegged Order Examples on FIX 5.0 Interface

Pegged orders are entered as a standard New Order Single Message (35=D) on the FIX 5.0 Interface. They have the following additional characteristics:

The Order Type (40) tag should always be "P" for a pegged order. The type of pegged order is specified by the PricePriceType (1094) Tag.

Pegged orders are always hidden and the Display Method (1084) should be set to 4.

A hard limit price can be specified. This is entered into the PriceLimitType (837) price field.

Pegged orders must be greater than the Large Order Threshold.

The MES can be specified in the MinQtySize (110) tag.

*Example: A Pegged order on the FIX 5.0 Interface - key tags*

FIX FIELDS	MID-PRICE PEG		BID PRICE PEG	OFFER PRICE PEG
Side (54)	Buy	Sell	Buy	Sell
Order Type (40)	P	P	P	P
Quantity (38)	User Defined	User Defined	User Defined	User Defined
Display Method (1084)	4	4	4	4
Security Exchange (207)	XLON	XLON	XLON	XLON
MinQtySize (110)	User Defined	User Defined	User Defined	User Defined
<Peg Instructions>				
PegOffsetValue (211)	User Defined	User Defined	User Defined	User Defined
PegMoveType (835)	0	0	0	0
PegOffsetType (836)	2	2	2	2
PegLimitType (837)	0	0	0	0
PegPriceType (1094)	2	2	4	4

## Appendix B: Pegged Order Examples on Native Interface

Participants specify the order is a Mid-Price Pegged order by using the Market Mechanism type on MP.

A hard limit price can be specified. This is entered into the Price field.

Mid-price pegged orders must be greater than the Large Order Threshold.

Please note that the Matching Instruction field relates to Baikal only.

*Example: A Pegged Mid-price order for an Instrument trading on SET1*

Enter Order		5EO AF		
Field Name	Offset	Length	Format	Fields used for mid-price Pegged orders
Market Mechanism Type	102	2	A	MP
Tradable Instrument Code	104	12	A	
Country Of Register	116	2	A	
Currency Code	118	3	A	
Order Reference	121	10	A	
Capacity	131	1	A	
Buy/Sell Indicator	132	1	A	
Client Reference	133	15	A	
Order Size	148	12	N	12000
Order Peak Size	160	12	N	
Price	172	18	N	HARD LIMIT PRICE
Personal Exposure	190	9	A	
Time Validity	199	4	N	
Date Validity	203	8	N	
Validity Type	211	3	A	
Clearing Type	214	3	A	
Settlement Account	217	1	A	
Minimum Execution Size	218	12	N	6000
Matching Instruction	230	1	A	Reserved for Baikal only
Reserved	231	3	A	
<b>Total Length</b>				<b>234 bytes</b>

## Appendix C: Native Message Structures

The following existing messages have been modified to cater for the new Minimum Execution Size functionality.  
Please note that the Matching Instruction Field relates to Baikal only and should be formatted with a space.

5EO Version AF				
Enter Order				
Architecture Header				
Field Name	Offset	Length	Format	Notes
Message Reference Number	8	10	A	
User Code	18	6	A	
Authentication Code	24	4	A	
Interchange Type	28	1	A	
Reserved Field	29	1	A	
Session Error Code	30	5	A	
Reserved Field	35	11	A	
Reserved Field	46	2	A	
<b>Total Length</b>	<b>48 bytes</b>			
Business Header				
Field Name	Offset	Length	Format	Notes
Service Code	48	3	A	T06 (Secure)
Segment Code	51	4	A	
Trader Group ID	55	11	A	
Message Type	66	3	A	
Message Version Identifier	69	2	A	"AF"
Date Of Prep	71	8	N	
Time Of Prep	79	6	N	
Part Message Seq Number	85	4	N	
Trader ID	89	11	A	
Unsolicited Connection Status	100	1	A	
Reserved Field	101	1	A	
<b>Total Length</b>	<b>102 bytes</b>			
Message Text				
Field Name	Offset	Length	Format	Notes
Market Mechanism Type	102	2	A	<i>HL and MP are two new Market Mechanism types</i>
Tradable Instrument Code	104	12	A	
Country Of Register	116	2	A	
Currency Code	118	3	A	

Participant Order Reference	121	10	A	
Capacity	131	1	A	
BuySell Indicator	132	1	A	
Client Reference	133	15	A	
Order Size	148	12	N	
Order Peak Size	160	12	N	
Price	172	18	N	
Personal Exposure	190	9	A	
Time Validity	199	4	N	
Date Validity	203	8	N	
Validity Type	211	3	A	
Settlement Venue	214	3	A	
Settlement Account	217	1	A	
Minimum Execution Size	218	12	N	
Matching Instruction	230	1	A	Reserved for Baikal only
Reserved	231	3	A	
<b>Total Length</b>	<b>234 bytes</b>			

5E3 Version AF				
Acknowledge Order Details				
Architecture Header				
Field Name	Offset	Length	Format	Notes
Message Reference Number	8	10	A	
User Code	18	6	A	
Authentication Code	24	4	A	
Interchange Type	28	1	A	
Reserved Field	29	1	A	
Session Error Code	30	5	A	
Reserved Field	35	11	A	
Reserved Field	46	2	A	
<b>Total Length</b>	<b>48 bytes</b>			
Business Header				
Field Name	Offset	Length	Format	Notes
Service Code	48	3	A	T06 (Secure)
Segment Code	51	4	A	
Trader Group ID	55	11	A	
Message Type	66	3	A	"5E3"
Message Version Identifier	69	2	A	"AF"
Date Of Prep	71	8	N	
Time Of Prep	79	6	N	
Part Message Seq Number	85	4	N	
Trader ID	89	11	A	
Unsolicited Connection Status	100	1	A	
Reserved Field	101	1	A	
<b>Total Length</b>	<b>102 bytes</b>			
Message Text				
Field Name	Offset	Length	Format	Notes
Order Code	102	10	A	
Participant Order Reference	112	10	A	
Remaining Order Size	122	12	N	
Tradable Instrument Code	134	12	A	
Country Of Register	146	2	A	
Currency Code	148	3	A	
Number Of Trades In Message	151	2	N	
Total Number of Trades	153	4	N	
Number Of Related Trade Messages	157	4	N	
Public Order Code	161	10	A	

Application Advisory Code	171	5	A	
Trade Message String	176		A	
<b>Total Length</b>	<b>bytes</b>			
Trade Message String				
<b>Field Name</b>	<b>Offset</b>	<b>Length</b>	<b>Format</b>	<b>Notes</b>
Trade Code	0	10	A	
Member ID Buy	10	11	A	
Member ID Sell	21	11	A	
Trade Size	32	13	S	
Trade Price	45	18	N	
Aggressive Passive Uncrossing Indicator	63	1	A	
Trade Date	64	8	N	
Trade Time	72	6	N	

5MO Version AD				
Modify Order				
Architecture Header				
Field Name	Offset	Length	Format	Notes
Message Reference Number	8	10	A	
User Code	18	6	A	
Authentication Code	24	4	A	
Interchange Type	28	1	A	
Reserved Field	29	1	A	
Session Error Code	30	5	A	
Reserved Field	35	11	A	
Reserved Field	46	2	A	
<b>Total Length</b>	<b>48 bytes</b>			
Business Header				
Field Name	Offset	Length	Format	Notes
Service Code	48	3	A	T06 (Secure)
Segment Code	51	4	A	
Trader Group ID	55	11	A	
Message Type	66	3	A	"5MO"
Message Version Identifier	69	2	A	"AD"
Date Of Prep	71	8	N	
Time Of Prep	79	6	N	
Part Message Seq Number	85	4	N	
Trader ID	89	11	A	
Unsolicited Connection Status	100	1	A	
Reserved Field	101	1	A	
<b>Total Length</b>	<b>102 bytes</b>			
Message Text				
Field Name	Offset	Length	Format	Notes
Order Code	102	10	A	
Tradable Instrument Code	112	12	A	
Country Of Register	124	2	A	
Currency Code	126	3	A	
Participant Order Reference	129	10	A	
BuySell Indicator	139	1	A	
Price	140	18	N	
Relative Size Change	158	13	S	
Time Validity	171	4	N	
Date Validity	175	8	N	

Client Reference	183	15	A	
Minimum Execution Size	198	12	N	
Matching Instruction	210	1	A	Reserved for Baikal only
Total Length	211 bytes			

5M6 Version AD				
Acknowledge Modify Order				
Architecture Header				
Field Name	Offset	Length	Format	Notes
Message Reference Number	8	10	A	
User Code	18	6	A	
Authentication Code	24	4	A	
Interchange Type	28	1	A	
Reserved Field	29	1	A	
Session Error Code	30	5	A	
Reserved Field	35	11	A	
Reserved Field	46	2	A	
<b>Total Length</b>	<b>48 bytes</b>			
Business Header				
Field Name	Offset	Length	Format	Notes
Service Code	48	3	A	T06 (Secure)
Segment Code	51	4	A	
Trader Group ID	55	11	A	
Message Type	66	3	A	"5M6"
Message Version Identifier	69	2	A	"AD"
Date Of Prep	71	8	N	
Time Of Prep	79	6	N	
Part Message Seq Number	85	4	N	
Trader ID	89	11	A	
Unsolicited Connection Status	100	1	A	
Reserved Field	101	1	A	
<b>Total Length</b>	<b>102 bytes</b>			
Message Text				
Field Name	Offset	Length	Format	Notes
Order Code	102	10	A	
Public Order Code	112	10	A	
Participant Order Reference	122	10	A	
Aggregate Size	132	12	N	
Aggregate Size Before Modification	144	12	N	
Remaining Total Size	156	12	N	
Remaining Total Size Before Modification	168	12	N	
Tradable Instrument Code	180	12	A	
Country Of Register	192	2	A	
Currency Code	194	3	A	
Number Of Trades In	197	2	N	

Message				
Total Number of Trades	199	4	N	
Number Of Related Trade Messages	203	4	N	
Application Advisory Code	207	5	A	
Trade Message String	212	1	A	
<b>Total Length</b>	<b>213 bytes</b>			
<b>Trade Message String</b>				
Field Name	Offset	Length	Format	Notes
Trade Code	0	10	A	
Member ID Buy	10	11	A	
Member ID Sell	21	11	A	
Trade Size	32	13	S	
Trade Price	45	18	N	
Aggressive Passive Uncrossing Indicator	63	1	A	
Trade Date	64	8	N	
Trade Time	72	6	N	

5RO Version AC				
Request Order Download				
Architecture Header				
Field Name	Offset	Length	Format	Notes
Message Reference Number	8	10	A	
User Code	18	6	A	
Authentication Code	24	4	A	
Interchange Type	28	1	A	
Reserved Field	29	1	A	
Session Error Code	30	5	A	
Reserved Field	35	11	A	
Reserved Field	46	2	A	
<b>Total Length</b>	<b>48 bytes</b>			
Business Header				
Field Name	Offset	Length	Format	Notes
Service Code	48	3	A	T05 (Interactive)
Segment Code	51	4	A	
Trader Group ID	55	11	A	
Message Type	66	3	A	"5RO"
Message Version Identifier	69	2	A	"AC"
Date Of Prep	71	8	N	
Time Of Prep	79	6	N	
Part Message Seq Number	85	4	N	
Trader ID	89	11	A	
Unsolicited Connection Status	100	1	A	
Reserved Field	101	1	A	
<b>Total Length</b>	<b>102 bytes</b>			
Message Text				
Field Name	Offset	Length	Format	Notes
Message Priority	102	1	N	103
<b>Total Length</b>	<b>103 bytes</b>			

5OF Version AC				
First Order Download Response				
Architecture Header				
Field Name	Offset	Length	Format	Notes
Message Reference Number	8	10	A	
User Code	18	6	A	
Authentication Code	24	4	A	
Interchange Type	28	1	A	
Reserved Field	29	1	A	
Session Error Code	30	5	A	
Reserved Field	35	11	A	
Reserved Field	46	2	A	
<b>Total Length</b>	<b>48 bytes</b>			
Business Header				
Field Name	Offset	Length	Format	Notes
Service Code	48	3	A	T05 (Interactive)
Segment Code	51	4	A	
Trader Group ID	55	11	A	
Message Type	66	3	A	"5OF"
Message Version Identifier	69	2	A	"AC"
Date Of Prep	71	8	N	
Time Of Prep	79	6	N	
Part Message Seq Number	85	4	N	
Trader ID	89	11	A	
Unsolicited Connection Status	100	1	A	
Reserved Field	101	1	A	
<b>Total Length</b>	<b>102 bytes</b>			
Transmission Header				
Field Name	Offset	Length	Format	Notes
Application Advisory Code	102	5	A	
Message Block Sequence Number	107	6	N	
Request Complete Indicator	113	1	A	
Number of Messages in Block	114	2	N	116
<b>Total Length</b>	<b>116 bytes</b>			
Message Text				
Field Name	Offset	Length	Format	Notes
Request Message Text	116		A	
Request Message Text Repeating Block				
Field Name	Offset	Length	Format	Notes
Market Segment Code	0	4	A	
Market Sector Code	4	4	A	
Tradable Instrument Code	8	12	A	

Country Of Register	20	2	A	
Currency Code	22	3	A	
Trader Group	25	11	A	
Buy/Sell Indicator	36	1	A	
Private Order Code	37	10	A	
Public Order Code	47	10	A	
Market Mechanism Type	57	2	A	
Validity Type	59	3	A	
Price	62	18	N	
Aggregate Size	80	12	N	
Remaining Order Size	92	12	N	
Order Peak Size	104	12	N	
Original Order Size	116	12	N	
Capacity	128	1	A	
Settlement Venue	129	3	A	
Settlement Account	132	1	A	
Time Validity	133	4	N	
Date Validity	137	8	N	
Personal Exposure	145	9	A	
Participant Order Reference	154	10	A	
Client Reference	164	15	A	
Minimum Execution Size	179	12	N	
Matching Instruction	191	1	A	Reserved for Baikal only
Reserved	192	3	A	

5S1 Version AC				
Subsequent Order Download Response				
Architecture Header				
Field Name	Offset	Length	Format	Notes
Message Reference Number	8	10	A	
User Code	18	6	A	
Authentication Code	24	4	A	
Interchange Type	28	1	A	
Reserved Field	29	1	A	
Session Error Code	30	5	A	
Reserved Field	35	11	A	
Reserved Field	46	2	A	
<b>Total Length</b>	<b>48 bytes</b>			
Business Header				
Field Name	Offset	Length	Format	Notes
Service Code	48	3	A	T05 (Interactive)
Segment Code	51	4	A	
Trader Group ID	55	11	A	
Message Type	66	3	A	"5S1"
Message Version Identifier	69	2	A	"AC"
Date Of Prep	71	8	N	
Time Of Prep	79	6	N	
Part Message Seq Number	85	4	N	
Trader ID	89	11	A	
Unsolicited Connection Status	100	1	A	
Reserved Field	101	1	A	
<b>Total Length</b>	<b>102 bytes</b>			
Transmission Header				
Field Name	Offset	Length	Format	Notes
Application Advisory Code	102	5	A	
Message Block Sequence Number	107	6	N	
Request Complete Indicator	113	1	A	
Number of Messages in Block	114	2	N	116
<b>Total Length</b>	<b>116 bytes</b>			
Message Text				
Field Name	Offset	Length	Format	Notes
Request Message Text	116		A	
<b>Request Message Text Repeating Block</b>				

Field Name	Offset	Length	Format	Notes
Market Segment Code	0	4	A	
Market Sector Code	4	4	A	
Tradable Instrument Code	8	12	A	
Country Of Register	20	2	A	
Currency Code	22	3	A	
Trader Group	25	11	A	
Buy/Sell Indicator	36	1	A	
Private Order Code	37	10	A	
Public Order Code	47	10	A	
Market Mechanism Type	57	2	A	
Validity Type	59	3	A	
Price	62	18	N	
Aggregate Size	80	12	N	
Remaining Order Size	92	12	N	
Order Peak Size	104	12	N	
Original Order Size	116	12	N	
Capacity	128	1	A	
Settlement Venue	129	3	A	
Settlement Account	132	1	A	
Time Validity	133	4	N	
Date Validity	137	8	N	
Personal Exposure	145	9	A	
Participant Order Reference	154	10	A	
Client Reference	164	15	A	
Minimum Execution Size	179	12	N	
Matching Instruction	191	1	A	Reserved for Baikal only
Reserved	192	3	A	



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