

LONDON NOTICE No. 2898

ISSUE DATE: 1 June 2007
EFFECTIVE DATE: 30 July 2007

SHORT TERM INTEREST RATE (“STIR”) OPTIONS MARKET ENHANCEMENTS

APPLICATION OF THE GUARANTEED CROSS FACILITY

INTRODUCTION OF THE STIR OPTION SCREEN BASED DESIGNATED MARKET MAKER SCHEME UTILISING EURONEXT.LIFFE LIQUIDITY PROVIDER SCHEME (“ELPS”) FUNCTIONALITY

Executive Summary

The purpose of this Notice is to advise members about enhancements to the market arrangements for the Three Month Euro (EURIBOR) Options and Mid-Curve Options Contracts and the Three Month Sterling (Short Sterling) Options and Mid-Curve Options Contracts. These enhancements comprise the application of the Guaranteed Cross facility and the introduction of a new screen-based Designated Market Maker (“DMM”) scheme utilizing Euronext.liffe Liquidity Provider Scheme (“ELPS”) functionality.

1. Introduction

- 1.1 Euronext.liffe’s Short Term Interest Rate (“STIR”) Option Contracts are a key element of its core interest rate portfolio. The Exchange’s goal is to continue to improve and develop its STIR portfolio and to offer its members the most efficient and effective market place for the trading of STIR contracts.
- 1.2 To support further the development of its STIR Options market the Exchange is introducing the following enhancements to the existing market model for Three Month Euro (EURIBOR), including Mid-Curve, Options (“Euribor Options”) and Three Month Sterling (“Short Sterling”), including Mid-Curve, Options (“Short Sterling Options”) (collectively, “STIR” Options”).
 - (a) for Wholesale Trading, the Guaranteed Cross facility.
 - (b) in the Central Order Book, a new screen-based DMM scheme utilizing (“ELPS”) functionality (“the Electronic DMM Scheme”).

Web site: www.euronext.com/derivatives

The **Euronext Derivatives Markets (“Euronext.liffe”)** include the markets for derivatives operated by Euronext Amsterdam, Euronext Brussels, Euronext Lisbon, Euronext Paris and LIFFE Administration and Management, referred to respectively as the Amsterdam, Brussels, Lisbon, Paris and London markets.

1.3 The new Electronic DMM Scheme will run in parallel with the existing DMM Scheme for Euribor and Short Sterling Options. Please refer to section 5 of this Notice for a more detailed description of the Scheme and instructions about how to apply for DMM status.

1.4 The enhancements to the market arrangements for Euribor and Short Sterling Options which are described in this Notice will take effect on and from **30 July 2007**. A customer testing period will be available before the launch. Please refer to section 4 for additional information.

2. Guaranteed Cross facility

2.1 In addition to the existing Central Order Book crossing mechanism, on and from 30 July 2007 the Guaranteed Cross facility will also be available for Euribor and Short Sterling Options. Members should refer to Attachment 2 to this Notice for an explanation of that facility. In addition, Attachment 3 to this Notice contains an update to Annexe One of the Euronext.liffe Trading Procedures in relation to the application of the Guaranteed Cross facility to Euribor and Short Sterling Options.

3. ELPS functionality: Market Making Orders, Throttles and Delta Protection

3.1 Members should refer to Attachment 1 to this Notice for full details of the ELPS functionality being introduced as part of these changes. The following is a summary.

3.2 **Market Making Orders (“MMOs”)** will allow a DMM, within the Electronic DMM Scheme to submit, revise or pull simultaneous bids and offers in an options series. MMOs are submitted in batches using a single message, and a DMM may use a single MMO Batch to create, revise or pull up to 32 bids and/or offers within the same contract. DMMs within the new Scheme will be the exclusive users of MMO functionality in STIR Options.

3.3 Members should note that for other market participants, order entry will remain unchanged. They will be able to submit a message which represents a single order (i.e. a bid or an offer in a single series), or a single “conventional” batch. These “conventional” batches allow a single message to submit or revise up to 16 single orders (i.e. a bid or an offer in a single series), or pull 64 orders.

3.4 An **Order Throttle** will be used to restrict the rate at which all participants can enter order messages, including “conventional” single order and batch order submissions and revisions, and MMO batches. This throttle will be set at 4 messages per second. In combination with the different order submission rights and restrictions described above, the Order Throttle will serve to create a technical advantage for Electronic DMMs to enable them to perform their market-making role. The order throttle will not be applied to pull orders.

3.5 Details of the overall order submission, revision and pull rates this will create for Electronic DMMs, existing DMMs, and other participants are as set out in Attachment 1.

3.6 A **Delta Protection** facility is exclusively available to Electronic DMMs in STIR Options. The facility gives the user a degree of protection against being traded on multiple quotes simultaneously. It maintains a cumulative delta position over the trading day, on a contract or expiry basis, which is updated every time the Electronic DMM trades. When the delta position exceeds a delta limit set by the Electronic DMM, the Trading Host will send a message to warn the trader and, optionally pull all his / her remaining MMOs in that contract or expiry, as specified by the Electronic DMM.

4. Customer Technical Support

- 4.1 The new functionalities and settings are available now in the Customer Technical Support Group (“CTSG”) environment until **20 July 2007**.
- 4.2 The Exchange **strongly recommends** that all users test these changes in the CTSG environment. To support the Guaranteed Cross functionality, MMOs and Delta protection, members will need to make sure their ISV or member developed application has “conformed” to this functionality in the CTSG environment
- 4.3 All Electronic DMMs will be contacted separately to organise a subsequent market-making test.
- 4.4 For further information, please contact CTSG:
Helpdesk: + 44 (0)20 7655 7110/7111/7112
e-mail: ctsg@aems.net
website: <http://www.euronext.com/ctsg>

5. Electronic DMM Scheme

- 5.1 London Notice No. 2866, issued 28 March 2007, informed members, amongst other things, of the extension of the DMM appointments under the existing DMM Scheme in STIR Options Contracts until the close of business on 28 September 2007 inclusive.
- 5.2 This Notice informs members of the Exchange’s decision to introduce an Electronic DMM Scheme for Euribor and Short Sterling Options Contracts, which will run in parallel with the existing DMM Scheme. The Electronic DMM Scheme is intended to promote on-screen liquidity in these Contracts by creating obligations for participating Electronic DMMs to make competitive two-way prices on LIFFE CONNECT[®]. Interested parties may apply for Electronic DMM status in either Euribor or Short Sterling Options Contracts or both. Please note that access to the Delta protection facility and the use of MMOs will **only** be available to successful Electronic DMMs. The Scheme will run from 30 July 2007 until the close of business on 31 March 2008 inclusive.
- 5.3 Electronic DMMs will be required to meet specified and agreed market-making obligations for 80% of the trading period between 07:02 to 18:00 for Euribor Options and 07:32 to 18:00 for Short Sterling Options. In addition, Electronic DMMs will be obliged to meet the benchmark requirements for 90% of the period between 16:00 and the 16:15, when the daily settlement price is determined. Electronic DMMs will receive fee rebates for business executed on LIFFE CONNECT[®] (excluding cross transactions and Block Trades). The following table contains the maximum bid/offer spread and minimum order size requirements that Electronic DMMs will be required to meet:

1st and 2nd Quarterly expiries

	Maximum Bid/Offer Spread (basis points)	Minimum Order Size (lots)
Options \geq 20% delta	1.5	250
Options $<$ 20% delta	1	

3rd and 4th Quarterly expiries

	Maximum Bid/Offer Spread (basis points)	Minimum Order Size (lots)
Options \geq 10% delta	1.5	250
Options $<$ 10% delta	1	

- 5.4 Two way prices will be required in the following outright strikes only: ATM calls, ATM puts, the first 5 OTM calls and the first 5 OTM puts. The ATM option strike is the closest strike to the last traded price of the underlying future, and its definition will be updated in real-time based on futures trades executed on LIFFE CONNECT[®].
- 5.5 For all other series, strategies and for Euribor and Short Sterling Mid-Curve Options, Electronic DMMs will be required to respond to RFQs on a “best efforts” basis. If a response to an RFQ leads to the execution of an order on-screen, the participating DMM will be rebated at the same level as they would for orders executed under their obligations as detailed in Section 5.3 above.
- 5.6 Overall DMM performance will be monitored and calculated using an 80:20 ratio (daily coverage: settlement coverage). For example, if a DMM meets the Exchange market obligations for 90% of the settlement coverage period (between 16:00 and 16:15) and for 90% of the daily coverage period, his total weighted average day performance is 90% (i.e. settlement coverage session: $90\% * 20\% = 18\%$, daily coverage: $90\% * 80\% = 72\%$). The Exchange recognises that DMMs will operate different options pricing models and the exact percentage amount of Delta during the daily session might differ from the Exchange’s model. For monitoring purposes, the Exchange will apply a 10% tolerance level **at** the 20% Delta and 10% Delta threshold levels (i.e. delta tolerance levels of 2% and 1% respectively). Every series that forms part of the DMM’s quantified obligation will be monitored on an individual basis. Overall performance is derived from the weighted average of all individual series in which the DMM is obliged to quote.
- 5.7 Should an Electronic DMM materially fail to meet its Electronic DMM obligations, the Exchange may determine a course of action to terminate its participation in the Scheme and/or to reduce or remove any entitlement of the Electronic DMM and, where appropriate, to re-charge in part or in full any rebates made under the terms of the Scheme.
- 5.8 Members, who are interested in applying for Electronic DMM status, should submit **an application to their Account Manager, by the close of business on Friday 15 June 2007**. Members or clients who would like additional information about the DMM Scheme should contact Harry Lamprinopoulos at Euronext.liffe.
- 5.9 The Scheme is open to all members with the appropriate trading rights. A non-member may undertake the market making activities on behalf of a member. However, in such cases the performance of the Electronic DMM obligations remains the responsibility of the member and, as such, Electronic DMM applications must be submitted to the Exchange with the full understanding and agreement of the member. In all cases, applicants should only apply for Electronic DMM status with the agreement of the relevant General Clearing Member.
- 5.10 Applications should contain the details of one Individual Trading Mnemonic (“ITM”) through which electronic market-making business will be submitted and of the TRS Account

Reference(s) to which electronic market-making business will be assigned. **Please note that all electronic market-making business must be assigned exclusively to nominated TRS Account(s).**

- 5.11 In addition, members should provide any supporting information with their application which they feel would be relevant, including but not limited to the following:
- (a) the number and experience of staff, both in terms of the Responsible Person and other staff, available to support the market-making commitments;
 - (b) the level of sophistication of their Automated Price Injection Models (“APIMs”), as any models must be registered with and approved by the Exchange; and
 - (c) the level of financial support, including in particular the level of risk capital, available to support the market-making commitments.
- 5.12 There will be no trade priority advantages provided by the Exchange to Electronic DMMs.
- 5.13 Electronic DMMs will be appointed through a competitive tender process. A Review Panel comprising members of the Exchange’s executive will examine applications for DMM status in the Scheme. No Panel member will have a material interest in any applicant, for example by way of personal or financial connection.
- 5.14 The Review Panel’s decision shall be final.
- 5.15 It is intended that the names of Electronic DMMs and the nature of their commitments will be promoted by the Exchange, including on the Euronext web site at www.euronext.com/derivatives.

For further information in relation to this Notice, members should contact their Account Manager or the following:

Interest Rate Product Management

+44 (0)20 7379 2222

stirs@liffe.com

FURTHER INFORMATION ON THE TECHNICAL FACILITIES FOR THE STIR OPTIONS MARKETPLACE

1. Market Making Orders (“MMOs”) and MMO Batches

- 1.1 Electronic DMMs will be the exclusive users of MMO functionality in STIR Options.
- 1.2 MMOs allow an Electronic DMM, via his or her Individual Trading Mnemonic (“ITM”), to submit simultaneous bids and offers into an options series. Within each derivatives product listed on LIFFE CONNECT[®], only ITMs which are technically registered at the Trading Host level may submit MMOs into that contract.
- 1.3 A single MMO may be used to create, revise or pull a bid and/or an offer in the same option series. MMOs are submitted in batches, so a single MMO Batch may be used to create, revise or pull bids and/or offers for multiple series within the same contract.
- 1.4 An Electronic DMM in STIR Options may enter up to 32 MMOs into the contract, in a single message. This will allow 32 series in that contract to have bids and/or offers submitted, revised or pulled, using this single message. LIFFE CONNECT[®] will then “unravel” the message and populate the order book with the updated quotes from the market-maker.

2. ‘Conventional’ Orders and Order Batches

- 2.1 Only Electronic DMMs are issued with MMO ITMs. For other participants, order entry will remain unchanged. They will only be able to submit a message which represents a single order (i.e. a bid or an offer in a single series), or a single “conventional” batch. These “conventional” batches allow a single message to submit or revise up to 16 single orders (i.e. a bid or an offer in a single series), or pull 64 orders.

3. Throttles

- 3.1 The current LIFFE CONNECT[®] API (Application Program Interface) has a default setting which limits the number of orders, or messages per second. This default setting is 100 messages per second (mps), per API session (or per ITM). Whilst this setting is relatively high compared with other electronic derivatives trading platforms, it was originally designed to support the electronic trading of futures markets. This API Throttle setting will remain unchanged.
- 3.2 An Order Throttle will be used to restrict the rate at which all participants can enter order messages, including ‘conventional’ single order and batch order submissions and revisions, and MMO batches (see above). This throttle will be set at 4 messages per second.
- 3.3 Electronic DMMs will be able to enter up to 4 order messages per second representing submission, revisions or pulls of both bids and offers in up to 32 series (i.e. changes to up to 128 series, or potentially up to 128 bids and 128 offers, per second). Other participants will also be able to enter 4 order messages per second, but these will only represent revision of 4 bids or offers in total or, if ‘conventional’ batches are used, submissions and revisions of up to 64 (4x16) bids or offers in total.

3.4 In summary, with all participants using 4 messages per second, for a single contract:

Participant	MMOs	'Conventional' Batches	'Conventional' Single Orders
Electronic DMM ITMs	32 MMOs per message, representing submission/revisions/pulls of bids and offers in up to 128 series (potentially up to 128 bids and 128 offers) per sec.	-	-
Existing DMM ITMs	-	Submission/revisions of up to 16 (or 64 for pulls) single orders per message, representing submissions/revisions of up to 64 (256 for pulls) bids or offers per sec.	Submission/revisions of up to 16 (or 64 for pulls) orders per second.
No scheme ITMs	-	Submission/revisions of up to 16 (or 64 for pulls) single orders per message, representing submissions/revisions of up to 64 (256 for pulls) bids or offers per sec.	Submission/revisions of up to 16 (or 64 for pulls) orders per second.

3.5 The Order Throttle will also serve to protect the LIFFE CONNECT[®] system from the increased traffic that the new Electronic DMM Scheme will create.

4. Delta Protection

4.1 The Delta Protection facility is exclusively available to Electronic DMMs in STIR Options. The facility gives the user a degree of protection against being traded on multiple quotes simultaneously. It maintains a cumulative delta position (i.e. the current underlying futures exposure) over the trading day, on a contract or expiry basis, which is updated every time the Electronic DMM trades.

4.2 When the delta position exceeds a delta limit set by the Electronic DMM, the Trading Host will send a message to warn the trader and, optionally pull all his / her remaining MMOs in that contract or expiry. As this action is taken at the Trading Host level, no other market participant can in fact trade with the Electronic DMM beyond his Delta limit, and he is therefore 'Delta Protected'.

4.3 Both contract level (for example, Euribor Option) and expiry level (for example, September 2007 Euribor Option) delta protection are available within LIFFE CONNECT[®]. The Delta Protection facility is only enabled for MMO ITMs, which in turn are only made available to Electronic DMMs.

**SUMMARY OF TRADING PROCEDURES GOVERNING PRE-NEGOTIATION AND
CROSS TRANSACTIONS FOR EURIBOR AND SHORT STERLING OPTIONS**

This note is provided for ease of reference and contains a summary of the relevant Trading Procedures. Members are advised to familiarize themselves with the definitive Trading Procedures which are contained in Part One of the Euronext.liffe Trading Procedures (Trading Procedure 3.4)

1. Members are able to procure matching business for an order through pre-negotiation within the member, with other members or with clients. Where there is a bid and an offer in the Central Order Book for the relevant contract month/series or strategy, matching business may be entered to the Trading Host without delay between the submission of the buy and sell orders.
2. Where there is no bid and/or no offer, an RFQ must be submitted and a prescribed delay observed (“the RFQ Period”) before matching business may be submitted. The prescribed delays are ten seconds in the case Euribor and Short Sterling Options. Having observed the relevant RFQ Period, the matching business must be submitted as soon as practicable and in any case within thirty seconds of the end of the RFQ Period.
3. For Euribor and Short Sterling Options, members will have the flexibility to choose between:
 - (a) submitting matching business to the Central Order Book; and
 - (b) submitting it using the Guaranteed Cross facility. This facility enables members to submit matching orders to the Trading Host which do not interact with orders in the Central Order Book, but whose price is constrained by the Central Order Book prices, as explained in paragraph 4.
4. Where matching business is to be submitted as a Guaranteed Cross, such trade must be:
 - (a) within the best bid and offer in the relevant Central Order Book; or
 - (b) for designated contracts, where the spread between the best bid and offer is at the minimum price movement for the Contract concerned, the Guaranteed Cross may be executed at the bid or offer price, providing the volume of the Guaranteed Cross satisfies a specified minimum volume threshold (the minimum volume thresholds for Euribor Options and Short Sterling Options are set out in Attachment 3 to this Notice); or
 - (c) where a bid but no offer, or an offer but no bid, exists in the Central Order Book, better than such bid or offer; and
 - (d) in any event, at a price which represents a fair value for the trade.

ANNEXE ONE TO THE EURONEXT.LIFFE TRADING PROCEDURES**GUARANTEED CROSS TRANSACTIONS****(Additions are shown underlined and deletions ~~struck through~~)**

As specified in Part One Trading Procedure 3.4.7 (b), for designated contracts pre-negotiated matching business may be executed using the Guaranteed Cross facility.

Business executed in this manner is subject to the pricing parameters set out in Part One Trading Procedure 3.4.8. The tables below specify which products may be traded using the Guaranteed Cross facility and the volume threshold which applies to Guaranteed Crosses where the price is at the best bid or offer (which is only permissible when the bid/offer spread is at the minimum price movement for the Contract concerned, i.e. it is at “one tick”).

Euronext Amsterdam (Last Revision Effective Date: 29 November 2004)

Product	Guaranteed Cross available	Volume threshold for crossing in a “one tick” market
Amsterdam Equity Options	Yes	500
Amsterdam Index Options	Yes	500
Amsterdam Index Futures	Yes	100
Amsterdam Currency Options	Yes	500
Amsterdam Currency Futures	Yes	100
Amsterdam Commodity Options	Yes	25
Amsterdam Commodity Futures	Yes	25

Euronext Brussels (Last Revision Effective Date: 25 October 2004)

Product	Guaranteed Cross available	Volume threshold for crossing in a “one tick” market
BEL20 [®] Index Future	Yes	50
BEL20 [®] Index Option	Yes	500
Individual Equity Options	Yes	250

Euronext Lisbon (Last Revision Effective Date: 25 October 2004)

Product	Guaranteed Cross available	Volume threshold for crossing in a “one tick” market
PSI20 [®] Index Future	Yes	25
Single Stock Futures	Yes	50

Euronext Paris

Last Revision Effective Date: 29 December 2006

Product	Guaranteed Cross available	Volume threshold for crossing in a “one tick” market
CAC40 [®] Index Future	Yes	500
CAC40 [®] Index Option (PXA)	Yes	1,000
CAC40 [®] Index Option (PXL)	Yes	10,000
FTSEurofirst 80 Index Future	Yes	500
FTSEurofirst 100 Index Future	Yes	500
Individual Equity Options (contract size 10 shares)	Yes	5,000
Individual Equity Options (contract size 100 shares)*	Yes	500
All Commodity products	No	n/a
All Financial products	No	n/a
All Tracker products	No	n/a

*available on and from 20 June 2005

LIFFE (Last Revision Effective Date: 30 July 2007)

Product	Guaranteed Cross available	Volume threshold for crossing in a “one tick” market
<u>All products</u>	<u>No</u>	<u>n/a</u>
<u>Euro (EURIBOR) Options</u>	<u>Yes</u>	<u>Please see details below</u>
<u>Euro (EURIBOR) Mid-Curve Options</u>	<u>Yes</u>	
<u>Short Sterling Options</u>	<u>Yes</u>	
<u>Short Sterling Options Mid-Curve Options</u>	<u>Yes</u>	
<u>All other products</u>	<u>No</u>	<u>n/a</u>

<u>Euro (EURIBOR) Options</u>	<u>Outrights in white months</u>	<u>3,000</u>
	<u>Outrights red months</u>	<u>1,000</u>
	<u>Strategies involving white months</u>	<u>5,000 in aggregate</u>
	<u>Strategies involving red months</u>	<u>2,000 in aggregate</u>
<u>Euro (EURIBOR) Mid-Curve Options</u>	<u>Outrights in all months</u>	<u>1,000</u>
	<u>Strategies involving all months</u>	<u>2,000 in aggregate</u>
<u>Short Sterling Options</u>	<u>Outrights in white months</u>	<u>2,000</u>
	<u>Outrights in red months</u>	<u>1,000</u>
	<u>Strategies involving white months</u>	<u>3,000 in aggregate</u>

	<u>Strategies involving red months</u>	<u>2,000 in aggregate</u>
<u>Short Sterling Mid-Curve Options</u>	<u>Outrights in all months</u>	<u>1,000</u>
	<u>Strategies involving all months</u>	<u>2,000 in aggregate</u>