

## LONDON NOTICE NO. 3761

Equivalent Notices are being issued to Members of all NYSE Liffe markets.

Issue Date: 20 November 2013

Effective Date: 21 November 2013

### UPDATED VERSION OF NYSE LIFFE'S CORPORATE ACTIONS POLICY

#### Executive Summary

This Notice informs Members of changes to NYSE Liffe's Corporate Actions Policy which will come into effect on 21 November 2013.

#### 1. Introduction

- 1.1. The purpose of this Notice is to inform Members of changes to NYSE Liffe's Corporate Actions Policy ("the Policy") which will come into effect on 21 November 2013.

#### 2. Background

- 2.1 These changes are intended to provide additional clarification in the Policy and to reflect the introducing of the Dividend Adjusted SSF Contracts as communicated in London Notice No. 3760, also issued today.

#### 3. Changes to the Policy

- 3.1. The changes can be summarised as follows (additions shown underlined/deletions ~~striketrough~~):

##### (i) DEFINITIONS

<u>Futures Contracts</u>	<u>means collectively the term for Futures Contracts (cash settlement and physical delivery) on individual shares or futures based on Indices (including the Dividend Adjusted SSF Contracts where not explicitly excluded).</u>
<u>Scrip Dividend</u>	<u>A dividend payment where shareholders have the right to choose whether to receive a cash dividend or shares.</u>
<u>Stock Dividend</u>	<u>A dividend payment made in the form of additional shares.</u>

The Euronext Derivatives Markets comprise 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. Euronext is part of the NYSE Euronext group.

(ii) Section 4.2 **ADJUSTMENT OF LOT SIZE**

For Flexible Contracts, only the lot size of series/maturities with open interest will be adjusted. For standard Universal Stock Futures Contracts, the lot size of all delivery months up to and including the furthest delivery month with open interest shall be adjusted by being divided by the ratio. For standard Individual Equity Option Contracts, the lot size of all expiry months up to and including the furthest maturity with open interest shall be adjusted by being divided by the ratio. For Dividend Adjusted SSF Contracts, the lot size of maturities will not be adjusted in the case of the Corporate Actions described in section 6.3.

For Paris Option Contracts, an equalisation payment will be made to neutralise the effect observed due to rounding of the Lot Size ~~or to the maintenance of the contract size~~ as mentioned in section 5.1. The equalisation payment amount will be determined by NYSE Liffe and its transfer between clearing members arranged by LCH.Clearnet.

(iii) Section 5.1 **RATIO METHOD**

In the case of **Futures Contracts**, the ratio is used to alter the Lot Size (by dividing the Lot Size by the ratio) and to create the Reference Price of each contract (by multiplying the previous business day's Daily Settlement Price by the ratio). For Dividend Adjusted SSF Contracts, the lot size of maturities will not be adjusted in the case of the Corporate Actions described in section 6.3.2.

(iv) Section 6. **CORPORATE ACTIONS TYPES**

- Bonus issues
- Stock splits and reverse stock splits
- Subdivision or consolidation of share capital
- Rights issues and open offers
- ~~Special~~ Dividends
- Demergers
- Liquidation
- Mergers and takeovers
- Share repurchases

(v) Section 6.3 **DIVIDENDS**

Art 6.3.1 Adjustment of option and Futures Contracts (excluding Dividend Adjusted SSF contracts) in the case of dividends.

In the case of cash, stock or Scrip Dividends, Option Contracts and Futures Contracts (excluding Dividend Adjusted SSF contracts) will only be adjusted if these dividends are special. NYSE Liffe will use the following criteria for deciding whether a dividend should be considered to be a special dividend: ---

Art 6.3.2 Adjustment of Dividend Adjusted SSF Contracts in the case of dividend.

In the case of cash, stock or Scrip Dividends, Dividend Adjusted SSF contracts will be adjusted, regardless of whether these dividends are ordinary or special dividends. The adjustment ratio outlined below will be used in making adjustments to Dividend Adjusted SSF contracts to cater for dividends, and shall be calculated as follows:

$$\text{Adjustment Ratio} = \frac{(P - Od - Ed) \times \left( \frac{O}{N} \right)}{(P)}$$

Where:

P= The official closing price of the cum entitlement share on the Relevant Stock Exchange

Od= Any ordinary dividend amount per share, to be paid to the shareholders as published by the issuer

Ed =The special dividend amount per share to be paid to the shareholders as published by the issuer which has the same ex-date as Od

O= Cum amount of shares (old)

N=Ex amount of shares (new)

NYSE Liffe shall adjust Dividend Adjusted SSF Contracts for the dividend amount as declared by the company. In case of Scrip Dividends, NYSE Liffe shall adjust Dividend Adjusted SSF Contracts for the cash alternative.

Where an adjustment is made to Dividend Adjusted SSF Contracts in relation to cash dividends and/or Scrip Dividends then the settlement price of the Dividend Adjusted SSF shall be adjusted by being multiplied by the Adjustment Ratio, and no adjustments shall be made to the lot size.

For all other corporate action adjustments made to Dividend Adjusted SSF Contracts, including Stock Dividends, both the Settlement price and the lot size are adjusted.

For the avoidance of doubt, in the case of an adjustment for cash dividends and/or Scrip Dividends in combination with another type of Corporate Action as described in this Document, then both the Settlement price and the lot size of Dividend Adjusted SSF Contracts shall be adjusted. in these cases, Settlement prices of Dividend Adjusted SSF Contracts shall be adjusted by being multiplied by the Adjustment Ratio, and the lot size of Dividend Adjusted SSF Contracts shall be adjusted by being divided by the Adjustment Ratio.

(vi) Section 6.6 MERGERS AND TAKEOVERS

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If those shares which form the offer consideration cannot be delivered, settled and/or traded in the Relevant Euronext Market Undertaking where the Option Contracts and Futures Contracts are admitted to trading and/or listed and of which the underlying shares are subject to the merger and/or takeover, then the open positions in the Option Contracts and Futures Contracts will be settled at their theoretical Fair Value (as described in Appendix 1).

Where the offer consideration is **composed purely of cash**, the open positions in the Option Contracts and ~~Stock~~-Futures Contracts will be settled at their theoretical Fair Value (as described in Appendix 1).

Where the **offer is composed of both shares and cash**, and if the share element cannot be delivered, settled and/or traded in the Relevant Euronext Market Undertaking where the Option Contracts and Futures Contracts are admitted to trading and/or listed and of which the underlying shares are subject to the merger and/or takeover, then all open positions in the Option Contracts and Futures Contracts will be settled at their theoretical Fair Value. If the share element can be delivered, settled and/or traded in the Relevant Euronext Market Undertaking where the Option Contracts and Futures Contracts are admitted to trading and/or listed and of which the underlying shares are subject to the merger and/or takeover, then the Ratio Method will be applied, such that the resulting contracts would become contracts purely on the share element. In this case the ratio will be based on the share price of the company issuing the bid.

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In the circumstance that the cash element represents over 67% of the total offer consideration, the open positions in the Option Contracts and Futures Contracts will be settled at their theoretical Fair Value (as described in Appendix 1), and the Ratio Method will not be applied. For the avoidance of doubt, once NYSE Liffe has determined the proportion of cash and made such announcement as to the type of adjustment methodology, the methodology will not then be changed simply due to share price movements affecting the proportion of cash.

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Adjustments to Options and Futures Contracts will be made when a relevant offer is declared effective by the offerer and if the threshold of the majority of the outstanding shares (50% + 1) is met.

(vii) Section 6.8 DELISTING

Where a company is delisted from its Relevant Stock Exchange on request of the relevant company and, as a consequence, the underlying Share is no longer deliverable on an exchange designated by NYSE Liffe, NYSE Liffe shall use the Fair Value method to settle the open positions in the Option Contracts and Futures Contracts as described in Appendix 1, whereby the determination of the implied volatilities for the purpose of settlement of the Options at Fair Value shall be based on the settlement prices of the relevant Options series over a ten business day period preceding the delisting.

(viii) Appendix ~~1A~~ CALCULATION OF FAIR VALUE

The Fair Values of Options and Futures contracts are calculated on the effective date. (for reference also see art. 6.6)

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$$S = Z - \sum_{i=1}^m D_i e^{-rt_i}$$

Di=Dividends amounts published by Markit Dividends, where the ex-date is during the option lifetime

m=The number of dividends paid out during the option's lifetime

~~r=Risk-free Interest~~ Interest rate over the option's lifetime

S=Share price, adjusted to take dividends into account

Z=Starting price of the share

ti=Time remaining until dividend payment (in years)

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**Step 2:** Calculation of the futures price

$$F = (S - D^*)e^{r(T-t)}$$

Where:

F = The futures price

S = The share price ~~(being the cash bid)~~

T-t = The remaining life of the Futures Contract

r = ~~Risk-free Interest~~ Interest rate for the remaining life of the Futures Contract

D\* = Present value of the future dividends during the remaining life of the Futures Contract

### A.1.2 Calculations of the theoretical value for futures.

NYSE Liffe will use the following model for the purpose of settling Futures Contracts at theoretical value.

**Step 1:** Adjustment of the price of the underlying security for future dividend flow

For futures, the price of the underlying security has to be adjusted for future dividends paid out during the remaining life time of the Futures Contract. Future dividends will be determined by Markit.

$$D^* = \sum_{i=1}^n D_i e^{-rt_i}$$

Where:

$D_i$	=	Dividends that are ex entitlement in period i
$D^*$	=	Present value of the future dividends during the remaining life of the Futures Contract
$r$	=	<del>Risk-free Interest</del> Interest rate for the remaining life of the future
$t_i$	=	The time to payment of a dividend divided by 365
$n$	=	Total number of all dividend payable in period i during the remaining life of the Futures Contract

### A.1.3. Calculations of the theoretical Fair Value for index futures.

**Step 1:** Adjustment of the price of the underlying security for future dividend flow

For futures, the price of the underlying security has to be adjusted for future dividends paid out during the remaining life time of the Futures Contract. Future dividends will be determined by Markit Dividends and will be converted into Index points

$$D^* = \sum_{i=1}^n D_i e^{-Rt_i}$$

Where:

$D_i$	=	Dividends that are ex entitlement in period i
$D^*$	=	Present value of the future dividends during the remaining life of the Futures Contract
$R$	=	<del>Risk-free Interest</del> Interest rate for the remaining life of the Futures Contract, expressed, for example as 0.03 for 3% <sup>10</sup>
$t_i$	=	The time to payment of a dividend divided by 365
$n$	=	Total number of all dividends payable during the remaining life of the Futures Contract

**Step 2:** Calculation of the futures price

$$F = (S - D^*)e^{r(T-t)}$$

F	=	The futures price
S	=	The last known price of the Index
T-t	=	The remaining life of the Futures Contract, expressed in years
r	=	<del>Risk-free Interest</del> <u>Interest</u> rate for the remaining life of the Futures Contract, expressed, for example as 0.03 for 3%
D*	=	Present value of the future dividends during the remaining life of the Futures Contract

#### A.1.4. Calculation of the theoretical value for Dividend Adjusted SSF contracts

NYSE Liffe will use the following model for the purpose of settling Dividend Adjusted SSF Contracts at theoretical value.

Calculation of the futures price:

$$F = (S)e^{r(T-t)}$$

Where:

F = The futures price

S = The share price

T-t = The remaining life of the Futures Contract

r = Interest rate for the remaining life of the Futures Contract

#### (ix) APPENDIX 2 EQUALISATION PAYMENTS

In the case that an equalisation payment is made necessary under this Policy Document, the Ratio Method will be applied in the following manner (as described in section 5.1):

1. The exercise prices (K) will be multiplied by the ratio to create the adjusted exercise prices, ~~rounded to two decimal places (K1), rounded~~ as described in section 4.32.
2. The Lot Size (Q) will be divided by the ratio to create the new Lot Size (Q1) which will be rounded to the nearest whole share (Q2) as described in section 4.32.

- 3.2. An updated version of the Policy document will be made available on the NYSE Euronext website ([www.nyx.com/corporateactionpolicy](http://www.nyx.com/corporateactionpolicy)).

For further information in relation to this Notice, Members should contact:

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