

London Stock Exchange Derivatives Market

MARKET NOTICE 2019/027

New incentive scheme for IOB Derivatives and guidelines for the cash settlement of Single Stock Options and Futures on IOB Derivatives names expiring after June 2019

Further to Market Notices [2018/077](#), London Stock Exchange Derivatives Market (LSEDM) is informing Member Firms of a new incentive scheme for IOB Derivatives to be launched, starting **1 May 2019**, alongside the publication of the settlement methodology for any remaining open positions on the date LSEDM withdraws its IOB Derivatives service on **21 June 2019**.

IOB Derivatives incentive scheme

The IOB Derivatives incentive scheme will alleviate LSEDM trading fees for Member Firms trading out of open positions in September 2019 and December 2019 IOB Derivatives (“Qualifying IOB Derivatives”) ahead of close of trading on 21 June 2019, which is the date these contracts will be withdrawn (“Effective Date”).

All Member Firms with open positions in Qualifying IOB Derivatives are eligible to participate in this scheme. For the avoidance of doubt, Member Firms must not utilise this scheme to establish new positions in Qualifying IOB Derivatives.

Member Firms that are eligible for this scheme will not be charged exchange trading fees for closing out positions in Qualifying IOB Derivatives. Clearing fees will continue to be charged.

The scheme commences on **1 May 2019** and will run until the withdrawal of IOB Derivatives from LSEDM on **21 June 2019**.

Remaining open interest at the Effective Date

Member Firms are encouraged to trade out of open IOB Derivative positions ahead of the Effective Date. However, if any open interest remains in September 2019 and December 2019 IOB Derivatives on the Effective Date, positions will be cash settled using the methodology described in the Appendix at the end of this Market Notice.

LSEDM will continue to provide periodic updates to Member Firms on the orderly wind down of trading in its Equity Derivative contracts.

If you have any questions, please contact the LSEDM Sales Team on +44 (0)20 7797 3833 or by email lsefm.sales@lseg.com.

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Appendix – Cash Settlement Methodology

Futures Positions Cash Settlement

The final settlement price F for IOB Derivatives Futures expiring in September or December 2019 will be calculated using the theoretical value formula described below:

$$F = (S - D)e^{(r\Delta t)}$$

where:

- S is the spot price of the underlying contract;
- D is the present value of any dividends generated by the underlying contract until maturity (Δt);
- r is the risk free interest rate;
- Δt is the time until maturity.

Options Positions Cash Settlement

The Cox-Ross-Rubinstein model will be used to calculate final settlement prices for IOB Derivatives Options expiring in September or December 2019. This same model has been in use for LSEDM Options since the market was launched. Implied volatility, calculated according to the prices available in the market, is the input volatility that has been used so far.

In order to calculate the final settlement price for the above-mentioned options, however, the use of a methodology that relies on the prices available in the option market was deemed not appropriate. Instead, historical volatility will be used as input volatility to the options pricing model.

Given an underlying contract, its historical volatility HV is defined as follows:

$$HV = \sqrt{\frac{\sum_{i=1}^n (u_i - u')^2}{n - 1}} * \sqrt{N}$$

where:

- n is the number of days the historical volatility of the underlying contract is calculated on;
- $u_i = \ln \frac{S_i}{S_{i-1}}$, for $i = 1, 2, \dots, n$;
- S_i is the closing price of the underlying contract for day i ;
- u' is the mean of the u_i ;
- N is the number of trading days in a year according to the IOB Derivatives trading calendar.