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AMENDMENTS ARE MARKED AS FOLLOWS:

INSERTIONS ARE UNDERLINED

DELETIONS ARE CROSSED OUT

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Part 1 Contract Specifications for Futures Contracts

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Subpart 1.20 Contract Specifications for Variance Futures Contracts

The following sub-part contains contract specifications for Futures Contracts on Variance ("Variance Futures Contracts").

1.20.1 Subject Matter of Contract

[...]

(3) The value of a Variance Futures contract shall be:

- EUR 1 per Variance Futures point for Variance Futures contracts on EURO STOXX® 50 Index (product ID: EVAR)

[...]

[...]

1.20.5 Price Gradations

The price of a Variance Futures Contracts shall be calculated with four decimal places. The minimum price change (tick) is 0.0001 points for Variance Futures Contracts on EURO STOXX® 50 Index (product ID: EVAR); this corresponds to a value of EUR 0.0001.

[...]

1.20.7 Trading convention

[...]

1.20.7.2 Conversion

[…]

1.20.7.2.2 Formula Trade Price Conversion

Volatility is converted into the Variance Futures price according to the following formulae:

1. Traded variance

$$traded\ variance\ (\sigma_t^2) = \frac{(traded\ "Volatility"\ (\sigma)^2 * (T-t) + \sigma_r^2 * t)}{T}$$

2. Traded Variance Futures price

$$traded\ Futures\ price(F_t(\sigma)) = \sout{D_t *}\ (traded\ variance\ (\sigma_t^2) - standard\ variance\ strike(\sigma_0^2)) \sout{- ARMVM_t} + C$$

where

T = *total amount of daily variance observations that are expected to occur during the lifetime of the contract*

t = *amount of daily variance observations that have occurred until the day of the trade match*

~~D_t = discount factor according to 1.20.7.2.2.3, valid at time t~~

σ_r^2 = *realized variance measured until and including the closing price of the underlying instrument at the end of the day of the trade match. Realized variance is calculated according to section 1.20.7.2.2.1*

σ_0^2 = *standard variance strike according to section 1.20.7.3*

~~$ARMVM_t$ = Accumulated Return on Modified Variation Margin – A correction term according to section 1.20.7.2.2.2~~

C = *a constant term*

1.20.7.2.2.1 Realized Variance

Realized variance is determined by the Management Board of Eurex Deutschland based on the closing prices of the underlying instrument between the first trading day and the final settlement day according to the following formula:

$$\sigma_r^2 = 10.000 * \frac{252}{t} \cdot \sum_{i=1}^{t} ln^2\left(\frac{S_i^{und}}{S_{i-1}^{und}}\right)$$

where

t = *amount of daily variance observations that have occurred until the day of the calculation*

~~S_t^{und} = end of day closing price of the underlying instrument~~

For all transactions concluded in the order book:

S_i^{und} = *the last price of the underlying instrument that is available to the trading system of Eurex Deutschland prior to the conversion calculation of the respective transaction*

and for transactions via the Eurex Trade Entry Services (TES):

$S_i^{und} =$
the custom price of the underlying instrument that is entered via the T7 Trade Entry Service

For daily and final settlement prices:

$$\boldsymbol{S_i^{und} = \text{the end of day closing price of the underlying instrument}}$$

1.20.7.2.2.2 ~~Accumulated Return on Modified STM Variation Margin~~[Deleted]

~~The Accumulated Return on Modified STM Variation Margin (ARMVM) is calculated on each variance observation day, using the following formula:~~

~~$ARMVM_t = ARMVM_{t-1} * e^{(r_{t-1}^t(\frac{\Delta t}{365}))} + (S_{t-1} - C) * (e^{(r_{t-1}^t(\frac{\Delta t}{365})} - 1)$,~~

~~where~~

~~S_{t-1} = the settlement price of the variance futures on the previous business day according to 1.20.7.4~~

~~r_{t-1}^t = the risk free overnight rate (€STR) that is published on the present business day by the European Central Bank~~

~~Δt = the difference between two subsequent calculations of the ARMVM in calendar days~~

~~C = a constant term~~

~~On the first trading day of a Variance Futures contract ARMVM is set to zero.~~

1.20.7.2.2.3 ~~Discount Factor~~[Deleted]

~~The discount factor is calculated on every exchange business day based on the following formula:~~

~~$D_t = e^{(\frac{-r_t(T-t)}{365})}$,~~

~~where~~

~~T = expiration date~~

~~t = calculation date~~

~~r_t = EURIBOR rate interpolated for the maturity of the Variance Futures contract, remaining between the calculation date and the expiration date~~

~~Interpolation Method:~~

~~Linear interpolation is used in order to determine the risk free interest rate. Inputs are the EURIBOR rates surrounding the maturity of the Variance Futures:~~

$$r_t = \frac{T_{K+1} - T}{T_{K+1} - T_K} * r(T_K) + \frac{T - T_K}{T_{K+1} - T_K} * r(T_{K+1}), \quad with\ T_K \leq T < T_{K+1},$$

~~where~~

~~T_{K+1} = maturity of the EURIBOR rate later than the Variance Futures maturity~~

~~T_K = maturity of the EURIBOR rate before the Variance Futures maturity~~

~~T = maturity of the Variance Futures~~

1.20.7.3 Standard Variance Strike

The standard variance strike (σ_0^2) is ~~determined by the Management Board of Eurex Deutschland on the first trading day of a new instrument and is kept unchanged during the lifetime of the instrument. The standard variance strike is based on the volatility level (σ) in percentage points that is observed in the market on that day.~~ set to uniformly 400 for all contract months and remains unchanged during the life time of a contract.

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