INDEX GUIDELINE

DB Volatility Trend Intraday Long Only Index

Version 1.01

04 December 2019

SOLACTIVE
German Index Engineering

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INTRODUCTION

This document (the "Guideline") is to be used as a guideline with regard to the composition, calculation and maintenance of the Index. Any changes made to the Guideline are initiated by the Committee specified in Section 1.6. The Index is calculated and published by Solactive AG. The name "Solactive" is trademarked.

It contains the underlying principles and rules regarding the structure and operation of the Volatility Trend Intraday Index (the "Index"). Solactive AG shall make every effort to implement the applicable regulations. Solactive AG does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the Index nor the Index value at any certain point in time nor in any other respect. The Index is merely calculated and published by Solactive AG and it strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for Solactive AG – irrespective of possible obligations to issuers – to advise third parties, including investors and/or financial intermediaries, of any errors in the Index. The publication of the Index by Solactive AG does not constitute a recommendation for capital investment and does not contain any assurance or opinion of Solactive AG regarding a possible investment in a financial instrument based on this Index.

1 INDEX SPECIFICATIONS

- The Volatility Trend Intraday Index (the "Index") is an Index of Deutsche Bank AG and is calculated and distributed by Solactive AG.
- The Index is a proprietary index of Deutsche Bank AG intended to track the performance of a strategy that trades the daily trend of the Underlying Index. In each of three times during an Index Business Day, the Index notionally buys or sells a date-weighted 30-day Futures in a size proportional to the Signal measured at such time and unwinds all Futures notionally bought or sold on such day at the daily settlement price of futures plus Trade at Settlement(TAS). The Signal is proportional to the percentage difference between the EOD measuring level of the Futures on the immediately preceding Index Business Day and the level of the Futures at the time the Signal is measured. The Index will not trade any Futures if the Signal does not meet a minimum variable threshold. Each of the three Signals is determined using a five minute TWAP process applied to the level of the Underlying Index starting at 10:00 a.m., 12:00 p.m. and 2:00 p.m. New York City time, respectively. Unless the Signal is zero, the Futures are traded at prices determined by a 15 minute TWAP process starting 10:15 a.m., 12:15 p.m. and 2:15 p.m. New York City time, respectively. All Futures notionally bought or sold during an Index Business Day will be unwound at the end of the day at a price based on the daily settlement level of the Futures on such day adjusted by TAS, which is determined by a 30 minute TWAP process starting 3:00 p.m. New York City time.
- The Index is an Excess Return index.
- The Index is published in USD.

1.1 SHORT NAME AND ISIN

The Index is distributed under ISIN DE000SLA6QD0; the WKN is SLA6QD. The Index is published on Bloomberg under the code DBVTILUU Index.

1.2 INITIAL VALUE

The Index is based on 1000 at the close of trading on the start date, September 11, 2012

1.3 DISTRIBUTION

The Index is published via the price marketing services of Boerse Stuttgart AG and is distributed to all affiliated vendors. Each vendor decides on an individual basis as to whether it will distribute/display the Index via its information systems.

1.4 PRICES AND CALCUATION FREQUENCY

The price of the Index is calculated on each Business Day based on the prices on the respective Exchanges on which the Index Components are listed. The most recent prices of all Index Components are used. Prices of Index Components not listed in the Index Currency are translated using spot foreign exchange rates quoted by Reuters. Should there be no current price available on Reuters, the most recent price or the Trading Price on Reuters for the preceding Trading Day is used in the calculation.

The Index is calculated every Business Day on a next day basis before 11AM Frankfurt local time. In the event that data cannot be provided to Bloomberg or to the pricing services of Boerse Stuttgart AG, the Index cannot be distributed.

1.5 OVERSIGHT

A Committee composed of staff from Solactive AG (the "Committee" or the "Index Committee") is responsible for decisions regarding the composition of the Index as well as any amendments to the rules.

Members of the Committee can recommend changes to the Guideline and submit them to the Committee for approval.

1.6 PUBLICATION

All specifications and information relevant for calculating the Index are made available on the http://www.solactive.com web page and sub-pages.

1.7 HISTORICAL DATA

Historical data will be maintained from the launch of the Index on Oct 3rd 2018.

1.8 LICENSING

Licenses to use the Index as the underlying value for derivative instruments are issued to stock exchanges, banks, financial services providers and investment houses by Solactive AG.

2 CALCULATION OF THE INDEX

2.1 BACKGROUND INFORMATION

The background information in this Section Fehler! Verweisquelle konnte nicht gefunden werden. is based on information obtained from various publicly available sources and is provided for information purposes only. The IP Owner has relied on these sources and has not independently verified the information extracted from these sources and accepts no responsibility or liability in respect thereof. Information on the CBOE VIX® Index can be obtained from the website of CBOE.

2.2 REALIZED VOLATILITY

Volatility is a statistical measure of how much an asset's return varies from the mean of such returns; the more variable the asset's returns, the higher its volatility, and the higher the perceived risk of such asset (all other things being equal). Volatility is one of the market standards for assessing risk. Volatility is generally calculated based on the natural logarithm return of an asset between each observation. Realized volatility is a calculation of this amount of movement historically from prices or levels of the asset observed periodically in the market over a set period. Realized volatility is characterized by the frequency of the observations of the asset price used in the calculation and the period over which observations are made. For example, six-month daily realized volatility denotes realized volatility calculated from daily closing asset prices over a six-month period.

2.3 CBOE VOLATILITY INDEX®

The CBOE VIX® Index is intended to provide a performance benchmark to measure the expected market volatility, providing market participants and observers with a measure of constant, 30-day expected volatility of the broad U.S. stock market. The calculation of the level of the VIX® Index (discussed below in further detail) is based on S&P 500 Index (SPXSM) options with more than 23 days and less than 37 days to expiration, over a wide range of strike prices, and then weights them to yield a constant, 30-day measure of the expected volatility of the S&P 500 Index. Specifically, the prices used to calculate VIX Index values are midpoints of real-time SPX option bid/ask price quotations.

The 500 companies are not the 500 largest companies listed on the New York Stock Exchange and not all 500 companies are listed on such exchange. S&P chooses companies for inclusion in the S&P 500® Index with an aim of achieving a distribution by broad industry groupings that approximates the distribution of these groupings in the common stock population of the U.S. equity market. S&P may from time to time, in its sole discretion, add companies to, or delete companies from, the S&P 500® Index to achieve the objectives stated above. Relevant criteria employed by S&P include the viability of the particular company, the extent to which that company represents the industry group to which it is assigned, the extent to which the company's common stock is widely-held and the market value and trading activity of the common stock of that company.

To be eligible for inclusion in the S&P 500® Index, a company must be a U.S. company with an unadjusted market capitalization in excess of $6.1 billion. Moreover, the company must have positive as-reported earnings over the most recent quarter, as well as over the most recent four quarters (summed together), and maintain a public float of at least 50%. In addition, the ratio of annual dollar value traded to float adjusted market capitalization for the company should be 1.0 or greater and the company should trade a minimum of 250,000 shares in each of the six months leading up to the evaluation date.

2.4 THE VIX FUTURES

The Futures are the VIX futures contracts on the Underlying Index, which are listed and traded on the Cboe Futures Exchange (CFE). The Futures are quoted in terms of the closing level of the Underlying Index in index points and are valued using a multiplier of $1000. The minimum price change (or tick size) of the Futures is $50, which corresponds to 0.05 index points.

The Futures settle on the Wednesday that is thirty days prior to the third Friday of the calendar month immediately following the month in which the contract expires ("Final Settlement Date"). If the third Friday of the month subsequent to expiration of the applicable VIX futures contract is a CBOE holiday, the Final Settlement Date for the contract shall be thirty days prior to the CBOE business day immediately preceding that Friday. At settlement, the Futures are cash settled in the morning immediately following the Final Settlement Date, using a final settlement price that is marked to a "Special Opening Quotation" of VIX calculated from the sequence of opening prices of the options used to calculate the index on the settlement date. The opening price for any series in which there is no trade shall be the average of that option's bid price and ask price as determined at the opening of trading.

An exchange-traded futures contract provides for the purchase and sale of a specified type and quantity of an underlying asset or financial instrument at a stated delivery time for a fixed price. Because the Underlying Index is not a tangible item that can be purchased and sold directly, a Futures provides for the payment and receipt of cash based on the level of the Underlying Index at settlement or upon liquidation of the contract.

Unlike equity securities, futures contracts, by their terms, have stated expirations and, at a specified point in time prior to expiration, trading in a futures contract for the current delivery month will cease. As a result, a market participant wishing to maintain its exposure to a futures contract on a particular asset or financial instrument with the nearest expiration must close out its position in the expiring contract and establish a new position in the contract for the next delivery month, a process referred to as "rolling." For example, a market participant with a long position in Futures expiring in March that wishes to maintain a long position in the nearest monthly delivery month will, as the March contracts near expiration, sell such Futures to close out the existing long position and buy new Futures expiring in April. This will "roll" the March position into a April position and, when the March contracts expire, the market participant will still have a long position in the nearest monthly delivery month.

2.4 TRADE AT SETTLEMENT TRANSACTIONS

Trade at Settlement ("TAS") transactions allow market participants to buy or sell futures contracts during the trading day equal to the yet-to-be determined settlement price. TAS transactions are permitted in VX futures and may be transacted on the CFE System, as spread transactions, as Block Trades (including as spread transactions) and as Exchange of Contract for Related Position transactions. The trading hours for all types of TAS transactions in VX futures are (i) during extended trading hours, except during the extended trading hours period from 3:30 p.m. Chicago time to 4:00 p.m. Chicago time on a normal Business Day; and (ii) during regular trading hours until two minutes prior to the close of regular trading hours at the end of a Business Day. TAS transactions in an expiring VX futures contract are not permitted during the Business Day of its final settlement date.

The permissible price range for all types of TAS transactions in VIX futures is from $100 (0.10 index points x $1,000) below the daily settlement price to $100 above the daily settlement price. The permissible minimum increment for all TAS transactions in VIX futures that are transacted on the CBOE System is 0.01 index points. Any TAS transaction must satisfy the requirements of CFE Rule 404A.

All TAS orders are required to be Day Orders. TAS Market Orders are not permitted. TAS Stop Limit Orders are permitted. VXT is the ticker symbol for VX TAS transactions.

3 CALCULATION OF THE INDEX

3.1 DATA REQUIREMENTS

In order to calculate the Index Level, on each Index Business Day, the Index Calculation Agent will observe the intraday market data specified in Section Fehler! Verweisquelle konnte nicht gefunden werden.0 (*Data required for the calculation of the Index*) below from the relevant Price Source, subject to the provisions set out in Section 3.6 (*Miscellaneous*).

"Price Source" means either (i) Reuters or (ii) any other market price information source, selected by the Index Calculation Agent in its sole discretion.

"RIC" means Reuters Instrument Code.

Data required for the calculation of the Index

"Signal TWAP Observation Periods" or "Signal TWAP Observation Period(i)" means 5 minute windows starting at 10:00 a.m. New York City time when i=1, 12:00 p.m. New York City time when i=2 and 2:00 p.m. New York City time when i=3.

"TWAP Trading Period" or "TWAP Trading Period(i)" means 15 minute windows starting at 10:15 a.m. New York City time when i=1, 12:15 p.m. New York City time when i=2 and 2:15 p.m. New York City time when i=3.

"TWAP Process" means a process of establishing a time-weighted average level on any Index Business Day(t). During any of the Signal TWAP Observation Periods, the relevant level will be recorded at every 15 second interval (each interval being a "TWAP Observation Interval"). In respect of each TWAP Observation Interval, the price or level to be recorded for such TWAP Observation Interval will be the most recent relevant price as published by the relevant price source on or after the Lookback Period Start Time to, and including, the end of such TWAP Observation Interval. If no such price or level exists, then no price or level will be recorded from such TWAP Observation Interval.

The "Lookback Period Start Time" means, for any relevant day, the time falling 30 minutes prior to the TWAP Process Start Time on such day. For the avoidance of doubt, the first time at which a price or level will be recorded (subject to there being a price or level to record) is the TWAP Process Start Time plus the TWAP Observation Interval.

"Future TWAP" or "$FuturesTWAP_n(t,i)$" means in respect of any date(t) and Signal TWAP Observation Period(i), the result of applying the TWAP process to the average "bid" and "ask" prices for the Future expiring on the nth Futures Expiry Date during the Signal TWAP Observation Period(i).

"Future Trading TWAP Bid" or "$FuturesTradingTWAPBid_n(t,i)$" means in respect of any date(t) and TWAP Trading Period(i), the result of applying the TWAP process to the "bid" price for the Future expiring on the nth Futures Expiry Date during the TWAP Trading Period(i).

"Future Trading TWAP Ask" or "$FuturesTradingTWAPAsk_n(t,i)$" means in respect of any date(t) and TWAP Trading Period(i), the result of applying the TWAP process to the "ask" price for the Future expiring on the nth Futures Expiry Date during the TWAP Trading Period(i).

"Futures End of Day Level" or "$FuturesEOD_n(t)$" means in respect of any date(t), the result of applying the TWAP Process during a 5 minute period starting 4:10 p.m. New York City time if date(t) is a regular trading and starting at 1:10 p.m. if date(t) is a half trading day in respect to the Futures Exchange.

"Future Close Level" or "$FuturesClose_n(t)$" means, in respect of any date(t), the settlement level of the Future expiring on the nth Futures Expiry Date.

"$Futures_n$" means each futures contracts on the Underlying Index, which is listed and traded on the Futures Exchange, expiring on the nth Future Expiry Date as of the current Index Business Day.

"Futures Exchange" means the CBOE Futures Exchange, LLC (CFE), or any successor to such exchange or quotation system or any substitute exchange or quotation system to which trading in futures contracts on the Underlying Index has temporarily relocated; provided that the Index Administrator has determined that there is comparable liquidity relative to futures contracts on the Underlying Index on such temporary substitute exchange or quotation system as on the original Futures Exchange.

"Underlying Index" has the meaning given in the Introduction.

"Trade at Settlement Bid" or "$TASBid_n(t)$" means in respect of any date(t), the bid premium required to sell $Futures_n$ during the trading day at the yet-to-be determined daily settlement price.

"Trade at Settlement Ask" or "$TASAsk_n(t)$" means in respect of any date(t), the ask premium required to buy $Futures_n$ during the trading day at the yet-to-be determined daily settlement price.

3.2 MISCELLANEOUS DEFINITIONS

"Index Business Day" means a day other than Saturday or Sunday on which the New York Stock Exchange ("NYSE") is scheduled to be open.

3.3 CALCULATION OF THE SIGNAL

(i) Contract Roll Weights

The "Contract Roll Weights" or "$CRW_n(t)$" in respect of an Index Business Day(t) is calculated according to the following equation:

$$CRW_1(t) = \frac{dr}{dt}$$
$$CRW_2(t) = \frac{dt - dr}{dt}$$

where:

dt = The total number of business days in the current Roll Period beginning with and including, the starting CBOE VIX Futures Settlement Date and ending with, but excluding, the following CBOE VIX Futures Settlement Date. The number of business days stays constant in cases of a new holiday introduced intra-month or an unscheduled market closure.

dr = The total number of business days within a roll period beginning with, and including the following business day and ending with, but excluding, the CBOE VIX Futures Settlement Date following the business day immediately following. The number of business days includes a new holiday introduced intra-month up to the business day proceeding such a holiday.

(ii) "Constant Weighted Futures TWAP" or "CWF(t,i)" in respect of an Index Business Day(t) and Signal TWAP Observation Period(i) is calculated according to the following equation:

$$CWF(t,i) = \sum_{n=1}^{2} FuturesTWAP_n(t,i) \times CRW_n(t-1)$$

(iii) "Constant Weighted Futures EOD" or "CWFEOD(t)" in respect of an Index Business Day(t) is calculated according to the following equation:

$$CWFEOD(t) = \sum_{n=1}^{2} FutureEOD_n(t) \times CRW_n(t-1)$$

(iv) "Constant Weighted Futures Close" or "CWFClose (t)" in respect of an Index Business Day(t) is calculated according to the following equation:

$$CWFClose(t) = \sum_{n=1}^{2} FutureClose_n(t) \times CRW_n(t-1)$$

(v) Percentage Change

The "Percentage Change" or "PChange(t,i)" in respect of any Index Business Day(t) and Signal TWAP Observation Period(i) is calculated according to the following equation:

$$PChange(t,i) = \frac{CWF(t,i) - CWFEOD(t-1)}{CWFEOD(t-1)}$$

(vi) Minimum Signal Threshold

In respect of each Index Business Day(t), the "Minimum Signal Threshold" or "MinThresh(t)" is:

$$MinThresh(t) = 0.50 \times \sqrt{\frac{1}{22}\sum_{i=1}^{22} ln^2\left(\frac{CWFEOD(t-i)}{CWFEOD(t-1-i)}\right)}$$

(vii) Signal

In respect of each Index Business Day(t) and Signal TWAP Observation Period(i) (Period(i)), the Signal and the notional number of Futures to be traded with respect to such Signal TWAP Observation Period or "n(t,i)" is determined in three steps.

First, a "Multiplier" or "Mult(t,i)" based on the Signal Threshold and the absolute value of the Percent Change for such Index Business Day(t) is calculated using the following formula:

$$Mult(t,i) = \begin{cases} 1 & |PChange(t,i)| >= Thresh(t,i) + 0.1\% \\ (|PChange(t,i)| - Thresh(t,i) + 0.1\%)/0.20\% & Thresh(t,i) + 0.1\% > |PChange(t,i)| > Thresh(t,i) - 0.1\% \\ 0 & Otherwise \end{cases}$$

Second, the notional number of Futures to trade or n(t,i) is then determined based on the previous Index Business Day's Index Level(t-1), the Percentage Change and the Multiplier.

$$n(t,i) = \frac{IL(t-1)}{1000} \times Max\big(0, Min(20, Adjusted\ Signal)\big)$$
$$Adjusted\ Signal = 100 \times PChange(t,i) \times Mult(t,i), \text{rounded to integer}$$

Where the value of Thresh(t,i) in respect of each of the Periods i is computed as follows.

For the first Period i=1

$$Thresh(t,1) = MinThresh(t)$$

For the second Period i=2

$$Thresh(t,2) = MinThresh(t)$$

except if the following two conditions are met:

a) The number of units traded in period 1 n(t,1) is not equal to zero AND

b) the direction or signs of PChange(t,1) and PChange(t,2) are the same (ie. both are positive or both are negative)

then

$$Thresh(t,2) = MinTresh(t) + ABS(PChange(t,1))$$

For the third Period i=3

$$Thresh(t,3) = MinThresh(t)$$

Except if one of the following is true:

1. the signs of PChange(t,2) and PChange(t,3) are the same AND n(t,2) is not equal to zero then:

$$Thresh(t,3) = MinTresh(t) + ABS(PChange(t,2))$$

2. the signs of PChange(t,1), PChange(t,2) and PChange(t,3) are all the same AND n(t,2) is equal to zero AND n(t,1) is not equal to 0 zero then:

$$Thresh(t,3) = MinTresh(t) + Max(ABS(PChange(t,1)), ABS(PChange(t,2)))$$

3. the signs of PChange(t,2) and PChange(t,3) are the different AND the signs PChange(t,1) and PChange(t,3) are the same AND n(t,1) is not equal to zero n(t,2) is equal to zero then:

$$Thresh(t,3) = MinTresh(t) + ABS(PChange(t,1))$$

(viii) "Constant Weighted Futures Trading TWAP" or "CWFTrading(t,i)" in respect of an Index Business Day(t) and TWAP Trading Period(i) is calculated according to the following equation:

$$CWFTrading(t,i) = \begin{cases} \sum_{n=1}^{2} FuturesTradingTWAPBid_n(t,i) \times CRW_n(t-1), & n(t,i) < 0 \\ \sum_{n=1}^{2} FuturesTradingTWAPAsk_n(t,i) \times CRW_n(t-1), & n(t,i) \geq 0 \end{cases}$$

(ix) "Trade at Settlement" or "$TAS_n(t)$" in respect of an Index Business Day(t) and the Futures Contract expiring on the nth Future Expiry Date as of Index Business Day(t) is calculated according to the following equation:

$$TAS_n(t) = \begin{cases} TASBid_n(t), & \sum_{i=1}^{3} n(t,i) \geq 0 \\ TASAsk_n(t), & \sum_{i=1}^{3} n(t,i) < 0 \end{cases}$$

(x) "Constant Weighted Futures TAS" or "CWFTAS(t)" in respect of an Index Business Day(t) is calculated according to the following equation:

$$CWFTAS(t) = \sum_{n=1}^{2} TAS_n(t) \times CRW_n(t-1)$$

3.4 CALCULATION OF THE INDEX LEVEL

The Index Level is determined on each Index Business Day(t) as the sum of the gains or losses implied by any notional Futures trades executed on that Index Business Day.

$$IL(t) = IL(t-1) + MtM(t)$$

If the Index Business Day(t) is a day on which the Futures Exchange is scheduled to close at 1:00 p.m. ("Half Day"), then

$$MtM(t) = 0$$

If the Index Business Day(t) is not a Half Day:

$$MtM(t) = \sum_{i=1}^{3} n(t,i) \times (CWFClose(t) + CWFTAS(t) - CWFTrading(t,i)) - 2 \times TC \sum_{i=1}^{3} |n(t,i)|$$

where:

IL(t) means the Index Level as of Index Business Day(t)

TC means the Transaction Cost of $0.0075

CWFClose(t) has the meaning given in Section Fehler! Verweisquelle konnte nicht gefunden werden.

CWF(t,i) has the meaning given in Section Fehler! Verweisquelle konnte nicht gefunden werden.

3.5 FEES AND EMBEDDED TRANSACTION COSTS

The Index has embedded a $0.0075 transaction cost (the "Transaction Cost") in connection with (i) establishing the Futures positions sold or bought on such Index Business Day and (ii) unwinding the Futures positions at the end of the day with TAS. As a result of the deduction of the Trading Costs, the level of the Index will be lower than would otherwise be the case if such Trading Costs were not included, and the level of the Index will decrease if the Index strategy does not generate sufficient returns to offset the effect of the Trading Costs. From the Base Date to and including 2017, the annual aggregate Trading Costs for the Index, expressed as a percentage of the retrospectively calculated Index Level, would have ranged from [ ] to [ ]. Because the calculation of the Index began on [ ], 2018, the annual Trading Costs from the Base Date to the Live Date were retroactively calculated. The annual Trading Costs after the Live Date could be higher and have a greater negative impact on the performance of the Index.

3.6 MISCELLANEOUS

3.6.1 Recalculation

Solactive AG makes the greatest possible efforts to accurately calculate and maintain its indices. However, the occurrence of errors in the index determination process cannot be ruled out. In such cases Solactive AG adheres to its publicly available Correction Policy.

3.6.2 Market Disruption

In periods of market stress Solactive AG calculates its indices following predefined and exhaustive arrangements set out in its publicly available Disruption Policy.

4 DISRUPTIONS AND CONSEQUENCES

Terms used in this Section 4.1 (Consequences of Disruptions) have the meanings given to them in Section 5 (Definitions).

4.1 Consequences of a Disruption Event

If a Disruption Event occurs or is continuing on any Index Business Day, the Index Administrator will determine in its reasonable discretion whether the occurrence or existence of such event is material in respect of the notional buying and/or selling of Futures and/or the calculation of the Index. In the event that the Index Administrator determines that the occurrence or existence of a Disruption Event is material in respect of the notional buying and/or selling of Futures and/or the calculation of the Index, the Index Administrator may:

1) determine any relevant price, value, amount, rate or level required in order to calculate the Index Level in respect of such Index Business Day;

2) suspend the notional buying and/or selling of Futures and/or defer the determination and publication of the Index Level until the next Index Business Day on which the Index Administrator determines that no Disruption Event exists; provided that where any such suspension of the notional buying and/or selling of Futures and/or deferral of determination and publication continues for a period of 10 consecutive Index Business Days, then the Index Administrator will:

   a) determine and, if applicable, publish the Index Level in respect of each Index Business Day falling in such period in its sole discretion taking into consideration the then-prevailing market conditions, the last reported price, value, rate, spread or level and such other factor(s) and condition(s) as the Index Administrator considers relevant for the purpose of determining such Index Level; and/or

   b) permanently cease determining and publishing the Index as of the later of (x) the date when such Disruption Event commenced or (y) the Index Business Day immediately following the last Index Business Day for which the Index Administrator calculated and, if applicable, published the relevant Index Level in accordance with sub-clause a) above (if any);

3) make such determinations and/or adjustments in relation to the Index Rules as it considers reasonably appropriate with regard to preserving the economic intention of the methodology of the Index as set out in this Index Description;

4) in the case of a Disruption Event due to an Underlying Index Event, select a successor exchange to replace the Exchange and/or a Successor Underlying Index, with such successor exchange and/or Successor Underlying Index to be selected by the Index Administrator with regard to preserving the economic intention of the methodology of the Index as set out herein and, in each case, make such adjustments to the Index to reflect such selection as it determines reasonably appropriate; and/or

5) permanently cease to determine, calculate and make available the Index Level and cancel the Index.

5 DEFINITIONS

"Change of Law or Rules" means there is a change in, or amendment to, the laws, rules or regulations relating to any Underlying Contract, and/or a change in any application or interpretation of such laws, rules or regulations.

"De Minimis Trading" means the number of any relevant Underlying Contracts traded on the Futures Exchange on any relevant Index Business Day is materially reduced or the liquidity in any relevant Underlying Contract is otherwise reduced for any reason.

"Disappearance of a Futures Price" means the failure of trading to commence, or the permanent discontinuation of trading in, a relevant Underlying Contract on the Futures Exchange.

"Disruption Event" means a Market Disruption Event, a Force Majeure Event, an Underlying Index Event or a TWAP Disruption Event.

"Force Majeure Event" means, in respect of the Index, an event or circumstance (including, without limitation, a systems failure, fire, building evacuation, natural or man-made disaster, act of God, act of state, armed conflict, act of terrorism, riot or labour disruption or any similar intervening circumstance), other than a TWAP Disruption Event or an Underlying Index Event, that is beyond the reasonable control of the Index Administrator and affects the calculations or determinations in respect of an Underlying Contract, the Underlying Index and/or the Index.

"Market Disruption Event" means an event (other than a Force Majeure Event or an Underlying Index Event) that would require the Index Administrator to make any determination in respect of the Index on an alternative basis all as determined by the Index Administrator. Without limitation to the foregoing, each of the following events shall be a Market Disruption Event:

(i) Change of Law or Rules;

(ii) De Minimis Trading;

(iii) Disappearance of a Futures Price;

(iv) Material Change in Circumstances;

(v) Material Change in Content;

(vi) Material Change in Formula or Determination;

(vii) Relevant Exchange Event;

(viii) Tax Disruption;

(ix) Trading Limitation;

(x) Trading Suspension; or

(xi) Transaction Disruption.

"Material Change in Circumstance" means the occurrence of any event which would make it impossible, or not reasonably practicable, for market participants in general to enter into or maintain or fulfil its obligations under any relevant Underlying Contract on the Futures Exchange or any other relevant trading market, as determined by the Index Administrator.

"Material Change in Content" means the occurrence since the Live Date of a material change in the content, composition or constitution of the Underlying Index to which a relevant Futures relates.

"Material Change in Formula or Determination" means the occurrence since the Live Date of a material change in the formula for or the method of calculating the price of a relevant Underlying Contract or the relevant prices in relation thereto by the Futures Exchange or any other relevant party, or a material modification of the Futures Exchange's determination and/or method for dissemination of the price of any Underlying Contract or the relevant prices in relation thereto.

"Relevant Exchange" means the New York Stock Exchange, or any successor thereto, as determined by the Index Calculation Agent.

"Relevant Exchange Event" means on any Index Business Day, the Relevant Exchange does not open on a day when it was scheduled to be open for trading for its regular full day.

"Tax Disruption" means the imposition of, change in or removal of any tax (including, without limitation, any excise, severance, sales, use, value-added, transfer, stamp, documentary, recording, financial transaction or similar tax) on, or in relation to, any relevant Underlying Contract or any constituents of the Underlying Index by any government or taxation authority after the Live Date, if the direct effect of such imposition, change or removal is to raise or lower the price of any Underlying Contract on any relevant day from what it would have been without that imposition, change or removal.

"Trading Limitation" means a limitation is imposed on trading in any relevant Underlying Contract on the Futures Exchange or any other relevant exchange, trading system or quotation system.

"Trading Suspension" means the suspension of trading in any relevant Underlying Contract on the Futures Exchange or any other relevant exchange, trading system or quotation system.

"Transaction Disruption" means the Index Administrator determines that market participants in general would: (i) be unable, after using reasonable efforts, to acquire, establish, re-establish, substitute, maintain, unwind or dispose (in whole or in part) of any Underlying Contract or any transaction(s) or asset(s) related to any Underlying Contract, (ii) be unable, after using reasonable efforts, to realize, recover or remit the

proceeds of any Underlying Contract or any transaction(s) or asset(s) related to any Underlying Contract or (iii) incur a materially increased cost (as compared with circumstances existing on the Live Date) due to the imposition, change or removal of any tax (including, without limitation, any excise, severance, sales, use, value-added, transfer, stamp, documentary, recording, financial transaction or similar tax) on, or in relation to, any relevant Underlying Contract or any constituents of the Underlying Index to (a) acquire, establish, re-establish, substitute, maintain, unwind or dispose (in whole or in part) of any Underlying Contract or any transaction(s) or asset(s) related to any Underlying Contract or (b) realize, recover or remit the proceeds of any Underlying Contract or any transaction(s) or asset(s) related to any Underlying Contract.

"TWAP Disruption Event" means, in respect of any relevant Index Business Day, an event or circumstance that makes it impossible or not practicable, in the determination of the Index Administrator, for any reason to carry out a TWAP Process for such Index Business Day, or the TWAP Process does not return a level for such Index Business Day.

"Underlying Contract" means a Futures or any other contract relating to the Underlying Index.

"Underlying Index Event" means any of the following:

(a) the Underlying Index Sponsor:

  (I) makes or announces that it will make a material change in the formula for or the method of calculating the Underlying Index or in any other way materially modifies the Underlying Index;

  (II) permanently cancels the Underlying Index and no Successor Underlying Index exists; and/or

  (III) on any relevant Index Business Day, fails to calculate and announce any relevant level of the Underlying Index;

(b) the failure of the Futures Exchange to announce or publish any information necessary for determining the price of an Underlying Contract;

(c) the failure of the Underlying Index Sponsor to announce or publish any information necessary for determining the level of the Underlying Index;

(d) any announcement or publication is made by the Futures Exchange of information necessary for determining the price of an Underlying Contract that the Index Administrator and/or the Index Calculation Agent determines is erroneous or insufficient for the determination of the price of such Underlying Contract; or

(e) the temporary or permanent discontinuance or unavailability of the Futures Exchange.

"Underlying Index Sponsor" means the entity, or any successor entity, that regularly calculates and publishes the Underlying Index.

6 CHANGES IN CALCULATION METHOD

The application by the Index Calculator of the method described in this document is final and binding. The Index Calculator shall apply the method described above for the composition and calculation of the Index. However, it cannot be excluded that the market environment, supervisory, legal, financial or tax reasons may require changes to be made to this method. The Index Calculator may also make changes to the terms and conditions of the Index and the method applied to calculate the Index that it deems to be necessary and desirable in order to prevent obvious or demonstrable error or to remedy, correct or supplement incorrect terms and conditions. The Index Calculator is not obliged to provide information on any such modifications or changes. Despite the modifications and changes, the Index Calculator will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.

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