

INDEX GUIDELINE

AI POWERED GLOBAL OPPORTUNITIES INDEX 8% VOLATILITY CONTROLLED

Version 1.0

22 November 2022

TABLE OF CONTENT

Int	Introduction				
1.	lı	ndex Specifications	4		
	1.1.	Scope of the Index	4		
	1.2.	Identifiers and Publication	4		
	1.3.	Initial Level of the Index	4		
	1.4.	Prices and calculation frequency	5		
	1.5.	Licensing	5		
2.	lı	ndex COMPONENTS	5		
3.	C	alculation of the Index	7		
	3.1.	Index formula	7		
	3.2.	calculation of the excess return LEVEL OF THE basket	10		
	3.3.	weekly weights Calculation	14		
	3.4.	Calculation of individual volatility-controlled levels	15		
	3.5.	Recalculation	20		
	3.6.	Market Disruption	21		
4.	A	I Forecased Return and Confidence Score	21		
	4.1.	Equbot	21		
	4.2.	AI Forecased returns	21		
	4.3.	AI Confidence Score	21		
5.	Ν	liscellaneous	22		
	5.1.	Discretion	22		
	5.2.	Methodology Review	22		
	5.3.	Changes in calculation method	22		
	5.4.	Termination	23		
	5.5.	Oversight	23		
6.	C	efinitions	24		
Сс	intac	t	26		

INTRODUCTION

This document (the "GUIDELINE") is to be used as a guideline with regard to the composition, calculation and maintenance of the AI Powered Global Opportunities Index 8% Volatility Controlled (the "INDEX"). Any amendments to the rules made to the GUIDELINE are approved by the OVERSIGHT COMMITTEE specified in Section 5.5. The INDEX is owned by EquBot Inc. (the "INDEX IP OWNER") is calculated, administered and published by Solactive AG ("SOLACTIVE") assuming the role as administrator (the "INDEX ADMINISTRATOR") under the Regulation (EU) 2016/1011 (the "BENCHMARK REGULATION" or "BMR"). The name "Solactive" is trademarked.

The INDEX will be governed by the INDEX ADMINISTRATOR. The INDEX ADMINISTRATOR controls the creation and operation of the INDEX, including (but not limited to) all stages and processes involved in the production, calculation, maintenance, administration and dissemination of the INDEX. Notwithstanding that the INDEX relies on information from third party sources, the INDEX ADMINISTRATOR has primary responsibility for all aspects of the INDEX administration and determination process

The GUIDELINE and the policies and methodology documents referenced herein contain the underlying principles and rules regarding the structure and operation of the INDEX. SOLACTIVE does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the INDEX nor the level of the INDEX at any certain point in time nor in any other respect. **The INDEX ADMINISTRATOR** strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for **the INDEX ADMINISTRATOR** – 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 **the INDEX ADMINISTRATOR** does not constitute a recommendation for capital investment and does not contain any assurance or opinion of **the INDEX ADMINISTRATOR** regarding a possible investment in a financial instrument based on this INDEX.

The text uses defined terms which are formatted with "SMALL CAPS". Such Terms shall have the meaning assigned to them as specified in Section 5 (Definitions).

1. INDEX SPECIFICATIONS

1.1. SCOPE OF THE INDEX

Category	Description
Asset Class	Multi-Asset
Strategy	The INDEX is aimed at replicating the performance a strategy which allocates between 18 individually volatility-controlled assets, applying a volatility control layer on top
Management fee	0.85%
Rebalancing frequency	Up to daily

1.2. IDENTIFIERS AND PUBLICATION

The INDEX is published under the following identifiers:

Name	ISIN	Currency	Туре	RIC	BBG ticker
Al Powered Global Opportunities Index 8% Volatility Controlled	DE000SL0GTW5	USD	Excess Return	.AIGO8	AIGO8 Index

The INDEX is published on the website of the INDEX ADMINISTRATOR (www.solactive.com) and is, in addition, available via the price marketing services of Boerse Stuttgart GmbH and may be distributed to all of its affiliated vendors. Each vendor decides on an individual basis as to whether it will distribute or display the INDEX via its information systems.

Any publication in relation to the INDEX (e.g. notices, amendments to the GUIDELINE) will be available at the website of the INDEX ADMINISTRATOR: https://www.solactive.com/news/announcements/.

1.3. INITIAL LEVEL OF THE INDEX

The initial level of the INDEX on 15/11/2006, the "START DATE", is 1000. Historical values from 08/11/2022, the "LIVE DATE", will be recorded in accordance with Article 8 of the BMR. Levels of the INDEX published for a period prior to the LIVE DATE have been back-tested.

1.4. PRICES AND CALCULATION FREQUENCY

A closing level of the INDEX is calculated for each CALCULATION DAY. This closing level is based on the CLOSING PRICES for the INDEX COMPONENTS.

1.5. LICENSING

Licenses to use the INDEX as the underlying value for financial instruments, investment funds and financial contracts may be issued to stock exchanges, banks, financial services providers and investment houses by the INDEX IP OWNER (or any of its affiliates).

2. INDEX COMPONENTS

The INDEX invests in the INDEX COMPONENTS detailed in the table below as follows:

- Each INDEX COMPONENT is transformed to its total return version, and is individually volatility controlled as described in Section 3.4
- These individually volatility-controlled INDEX COMPONENTS are then combined in a basket (the "BASKET"), which is rebalanced on a weekly basis based on certain signals.
- The BASKET is transformed to an excess return time series, and a volatility control mechanism is applied on top of the excess return transformed BASKET

The INDEX is then rebalanced on the REBALANCING DAY immediately following the relevant SIGNAL CALCULATION DAY.

#	Name	RIC	BBG	Туре	Exchange*
1	SPDR S&P 500 ETF ("INDEX COMPONENT 1")	SPY.P	SPY UP Equity	ETF	NYSE Arca
2	INVESCO QQQ TRUST SERIES 1 ("INDEX Component 2")	QQQ.OQ	QQQ UQ Equity	ETF	NASDAQ
3	ISHARES MSCI EMERGING MARKETS ETF ("INDEX COMPONENT 3")	EEM.P	EEM UP Equity	ETF	NYSE Arca
4	ISHARES MSCI EAFE ETF ("INDEX COMPONENT 4")	EFA.P	EFA UP Equity	ETF	NYSE Arca
5	ISHARES MSCI JAPAN ETF ("INDEX Component 5")	EWJ.P	EWJ UP Equity	ETF	NYSE Arca
6	ISHARES RUSSELL 2000 ETF ("INDEX Component 6")	IWM.P	IWM UP Equity	ETF	NYSE Arca

7	ISHARES 1-3 YEAR TREASURY BO ("INDEX Component 7")	SHY.OQ	SHY UQ Equity	ETF	NASDAQ
8	ISHARES 20+ YEAR TREASURY BO ("INDEX Component 8")	TLT.OQ	TLT UQ Equity	ETF	NASDAQ
9	ISHARES IBOXX INVESTMENT GRA ("INDEX Component 9")	LQD.P	LQD UP Equity	ETF	NYSE Arca
10	ISHARES IBOXX HIGH YIELD COR ("INDEX Component 10")	HYG.P	HYG UP Equity	ETF	NYSE Arca
11	ISHARES JP MORGAN USD EMERGING MARKETS BOND ETF ("INDEX COMPONENT 11")	EMB.OQ	EMB UP Equity	ETF	NASDAQ
12	VANGUARD TOTAL INTERNATIONAL BOND ETF ("INDEX COMPONENT 12")	BNDX.OQ	BNDX UQ Equity	ETF	NASDAQ
13	ISHARES TIPS BOND ETF ("INDEX Component 13")	TIP.P	TIP UP Equity	ETF	NYSE Arca
14	HSBC MacroEconomic Treasury Yield Spread Volatility Net ("INDEX COMPONENT 14")	.HSMETYSN	HSMETYSN Index	Index	
15	ENERGY SELECT SECTOR SPDR FUND ("INDEX COMPONENT 15")	XLE.P	XLE UP Equity	ETF	NYSE Arca
16	SPDR S&P METALS & MINING ETF ("INDEX Component 16")	XME.P	XME UP Equity	ETF	NYSE Arca
17	SPDR GOLD SHARES ("INDEX COMPONENT 17")	GLD.P	GLD UP Equity	ETF	NYSE Arca
18	ISHARES US REAL ESTATE ETF ("INDEX Component 18")	IYR.P	IYR UP Equity	ETF	NYSE Arca

If the INDEX ADMINISTRATOR determines that an INDEX COMPONENT has been delisted from its respective EXCHANGE as listed in the table above, the replacement Exchange in respect of such INDEX COMPONENT shall be the EXCHANGE of the primary listing of such INDEX COMPONENT as determined by the INDEX ADMINISTRATOR.

3. CALCULATION OF THE INDEX

3.1. INDEX FORMULA

The INDEX is calculated as an excess return Index.

The Index level (VCL_t) on each Calculation Day t is calculated in accordance with the following formula: If Calculation Day t is the Start Date:

$$VCL_{t} = 1000$$

Else:

$$VCL_{t} = VCL_{t-1} * \left(1 + E_{t-1} * \left(\frac{ERB_{t}}{ERB_{t-1}} - 1 \right) - fee * \frac{DC_{t,t-1}}{360} - TC * abs(E_{t} - E_{t-1}) \right)$$

Where:

abs	The absolute value.
VCL _t	The level of the INDEX as of CALCULATION DAY t
VCL_{t-1}	The level of the INDEX as of the CALCULATION DAY immediately preceding CALCULATION DAY t
ERB_t	The Excess Return Level of the Basket as of Calculation Day t
ERB_{t-1}	The Excess Return Level of the Basket as of the Calculation Day immediately preceding Calculation Day t
fee	The management fee of 0.85%
$DC_{t,t-1}$	The number of calendar days in the period from (and including) CALCULATION DAY t to (but excluding) the CALCULATION DAY immediately preceding CALCULATION DAY t.
ТС	The transaction costs parameter of 0.02%
E _t	The Exposure in respect of the INDEX as of CALCULATION DAY t
E_{t-1}	The Exposure in respect of the INDEx as of the Calculation Day immediately preceding Calculation Day \ensuremath{t}

The exposure (the "EXPOSURE") in respect of the INDEX as of the CALCULATION DAY immediately preceding the START DATE is calculated as follows:

 $E_t = 0$

The EXPOSURE in respect of the INDEX as of the CALCULATION DAY falling on the START DATE is calculated as follows:

$E_t = 25\%$

The EXPOSURE in respect of the INDEX as of each CALCULATION DAY t following the START DATE is calculated as follows:

(i) If the amount equal to (a) the TARGET EXPOSURE in respect of CALCULATION DAY t minus (b) the EXPOSURE in respect of the immediately preceding CALCULATION DAY is less than or equal to the REBALANCING THRESHOLD, the EXPOSURE in respect of such CALCULATION DAY t will be equal to the Exposure in respect of the immediately preceding CALCULATION DAY;

(ii) If the amount equal to (a) the EXPOSURE in respect of the immediately preceding CALCULATION DAY minus (b) the TARGET EXPOSURE in respect of CALCULATION DAY t is less than or equal to the REBALANCING THRESHOLD, the EXPOSURE in respect of such CALCULATION DAY t will be equal to the EXPOSURE in respect of the immediately preceding CALCULATION DAY;

(iii) Otherwise, the Exposure in respect of Calculation Day t shall be the Target Exposure in respect of such Calculation Day t

Expressed as a formula:

$$E_{t} = \begin{cases} E_{t-1} \text{ if } |TargetE_{t} - E_{t-1}| \leq rebalancingThreshold \\ TargetE_{t} & otherwise \end{cases}$$

Where:

E _t	The Exposure as of Calculation Day t
TargetE _t	The TARGET EXPOSURE as of the CALCULATION DAY t
E_{t-1}	The Exposure as of the Calculation Day immediately preceding Calculation Day \boldsymbol{t}
rebalancingThreshold	The rebalancing threshold of 10%

The TARGET EXPOSURE (the "TARGET EXPOSURE") as of each CALCULATION DAY t which falls on or immediately follows the START DATE is calculated in accordance with the following formula:

$$TargetE_{t} = min\left(min(MaxExp, E_{t-1} + \Delta), max\left(E_{t-1} - \Delta, \frac{TargetVol}{\sigma_{t-1}}\right)\right)$$

Where:

 $TargetE_t$ The Target Exposure as of Calculation Day t

max	Whenever followed by a series of amounts inside brackets, whichever is the greater of the amounts separated by a comma inside those brackets.
min	Whenever followed by a series of amounts inside brackets, whichever is the lesser of the amounts separated by a comma inside those brackets.
MaxExp	The maximum exposure of 150%
E_{t-1}	The Exposure in respect of the Index as of the Calculation Day immediately preceding Calculation Day t
Δ	The buffer of 25%
TargetVol	The level of target volatility of 8%
σ_{t-1}	The REALIZED VOLATILITY as of the CALCULATION DAY immediately preceding CALCULATION DAY t

The REALIZED VOLATILITY (the "REALIZED VOLATILITY") is calculated as of each CALCULATION DAY t according to the following set of formulas:

$$\sigma_t = max(\sigma_{t,s}, \sigma_{t,l})$$

Where:

σ_t	The Realized volatility as of Calculation Day t
тах	Whenever followed by a series of amounts inside brackets, whichever is the greater of the amounts separated by a comma inside those brackets.
$\sigma_{s,t}$	The short-term volatility as of CALCULATION DAY t

 $\sigma_{l,t}$ The long-term volatility as of CALCULATION DAY t

The short-term and long-term volatilities as of CALCULATION DAY t are derived from their respective variances in accordance with the following formulas:

$$\sigma_{t,s} = \sqrt{252 * Var_{t,s}}$$
$$\sigma_{t,l} = \sqrt{252 * Var_{t,l}}$$

The short-term and long-term variances are calculated for each CALCULATION DAY t following the VARIANCE START DAY in accordance with the following formulas:

$$\begin{aligned} &Var_{t,s} = \lambda_s * Var_{t-1,s} + (1 - \lambda_s) * \left(log\left(\frac{ERB_t}{ERB_{t-1}}\right) \right)^2 \\ &Var_{t,l} = \lambda_l * Var_{t-1,l} + (1 - \lambda_l) * \left(log\left(\frac{ERB_t}{ERB_{t-1}}\right) \right)^2 \end{aligned}$$

Where:

$Var_{t,s}$	The short-term variance as of CALCULATION DAY t
$Var_{t,l}$	The long-term variance as of CALCULATION DAY t
λ_s	0.94
λ_l	0.97
$Var_{t-1,s}$	The short-term variance as of the CALCULATION DAY immediately preceding CALCULATION DAY t
$Var_{t-1,l}$	The long-term variance as of the CALCULATION DAY immediately preceding CALCULATION DAY t
log	The natural logarithm to the basis of Euler's number $m{e}$ (~2.781)
ERB_t	The Excess Return Level of the Basket as of Calculation Day t
ERB_{t-1}	The Excess Return Level of the Basket as of the Calculation Day immediately preceding Calculation Day ${\rm t}$

On the VARIANCE START DAY, each of the long-term and short-term variance are incepted with a value of 0.0000149424953813507.

3.2. CALCULATION OF THE EXCESS RETURN LEVEL OF THE BASKET

The excess return level (the "Excess Return Level") of the BASKET as of each CALCULATION DAY t following the BASKET START DAY is calculated according to the following formula:

$$ERB_t = ERB_{t-1} * \left(1 + \left(\frac{B_t}{B_{t-1}} - 1\right) - \left(\frac{C_t}{C_{t-1}} - 1\right)\right)$$

Where:

 ERB_t The Excess Return Level of the Basket as of Calculation Day t

 ERB_{t-1} The EXCESS RETURN LEVEL of the BASKET as of the CALCULATION DAY immediately preceding CALCULATION DAY t

- *B*_t The BASKET LEVEL as of CALCULATION DAY t
- B_{t-1} The BASKET LEVEL as of the CALCULATION DAY immediately preceding CALCULATION DAY t
- Ct The Cash Index Level as of Calculation Day t
- C_{t-1} The CASH INDEX LEVEL as of the CALCULATION DAY immediately preceding CALCULATION DAY t

The Excess Return Level as of the BASKET START DAY is calculated as follows:

$$ERB_t = 100$$

The level of the CASH INDEX (the "CASH INDEX LEVEL") as of each CALCULATION DAY t is calculated according to the following formula:

$$C_t = C_{t-1} * \left(1 + rate_{t-2} * \frac{DC_{t,t-1}}{360} \right)$$

- C_t The Cash Index Level as of Calculation Day t
- Ct-1 The CASH INDEX LEVEL as of the CALCULATION DAY immediately preceding CALCULATION DAY t
- $DC_{t,t-1}$ The number of calendar days in the period from (but excluding) CALCULATION DAY t to (and including) the CALCULATION DAY immediately preceding CALCULATION DAY t
- $rate_{t-2}$ The RATE as of the CALCULATION DAY immediately preceding CALCULATION DAY t

The rate (the "RATE") as of each CALCULATION DAY is calculated as follows:

In respect of a Calculation Day which falls prior to the RATE SWITCH DAY, the RATE as of such Calculation Day is equal to the Federal Funds RATE (RIC: USONFFE=) as of the Calculation Day immediately preceding such Calculation Day.

In respect of a CALCULATION DAY which falls on or after the RATE SWITCH DAY, the RATE as of such CALCULATION DAY is equal to the SECURED OVERNIGHT FUNDING RATE (RIC: USDSOFR=) as of the CALCULATION DAY immediately preceding such CALCULATION DAY.

The level of the BASKET (the "BASKET LEVEL") as of each CALCULATION DAY t is calculated according to the following formula:

INDEX GUIDELINE

$$\begin{split} B_t &= B_{t-1} * \left(1 + \sum_{i=1}^{18} x_{t-1}^i * \left(\frac{VC_t^i}{VC_{t-1}^i} - 1 \right) + \left(1 - \sum_{i=1}^{18} x_{t-1}^i \right) * \left(\frac{C_t}{C_{t-1}} - 1 \right) + R_t * TC \\ & * \sum_{i=1}^{18} abs(x_t^i - x_{t-1}^i) \right) \end{split}$$

B_t	The Basket Level as of Calculation Day t	
B_{t-1}	The BASKET LEVEL as of the CALCULATION DAY immediately preceding CALCULATION DAY t	
VCti t	The Volatility-Controlled Level of Index Component i as of Calculation Da	۹Y
VC_{t-1}^i	The Volatility-Controlled Level of Index Component i as of the Calculation D immediately preceding Calculation Day t	Jay
C _t	The Cash Index Level as of Calculation Day t	
C_{t-1}	The Cash Index Level as of the Calculation Day immediately preceding Calculation Day t	t
R_t	An indicator variable equal to :	
	- 1, if Calculation Day t is a Basket Rebalancing Day;	
	- O otherwise	
ТС	The transaction costs parameter of 0.02%	
x_{t-1}^i	The Weight of Index Component i as of the Calculation Day immediately precedi Calculation Day t	ng
x_t^i	The Weight of Index Component i as of Calculation Day t	
abs	The absolute value.	

The weight (the "WEIGHT") of each INDEX COMPONENT i is calculated as follows:

The WEIGHT of each INDEX COMPONENT i as of a CALCULATION DAY t which is not a BASKET REBALANCING DAY is calculated in accordance with the following formula:

$$x_{t}^{i} = \frac{\frac{x_{R}^{i} * VC_{t}^{i}}{VC_{R}^{i}}}{\sum_{j=1}^{18} \frac{x_{R}^{j} * VC_{t}^{j}}{VC_{R}^{j}} + (1 - \sum_{j=1}^{18} x_{R}^{j})\frac{C_{t}}{C_{R}}}$$

Where:

R The BASKET REBALANCING DAY immediately preceding CALCULATION DAY t

j Each INDEX COMPONENT comprising the INDEX.

 x_t^i The Weight of Index Component i as of Calculation Day t

 x_R^i The WEIGHT of INDEX COMPONENT i as of the BASKET REBALANCING DAY immediately preceding CALCULATION DAY t

 VC_t^i The Volatility-Controlled Level of Index Component i as of Calculation Day t

- VC_R^i The Volatility-Controlled Level of Index Component i as of the Basket Rebalancing Day immediately preceding Calculation Day t C_t The Cash Index Level as of Calculation Day t
- C_R The CASH INDEX LEVEL as of the BASKET REBALANCING DAY immediately preceding CALCULATION DAY t

The WEIGHT of each INDEX COMPONENT i as of a CALCULATION DAY t which is a BASKET REBALANCING DAY is calculated as an average of the WEEKLY WEIGHTS of such INDEX COMPONENT i over the last 4 BASKET REBALANCING DAYS (including the most recent BASKET REBALANCING DAY) in accordance with the following formula:

$$x_{R}^{i} = \frac{w_{R}^{i} + w_{R-1}^{i} + w_{R-2}^{i} + w_{R-3}^{i}}{4}$$

Where:

- x_R^i The Weight of Index Component i as of Calculation Day t which is also a Basket Rebalancing Day
- w_R^i The WEEKLY WEIGHT of INDEX COMPONENT i as of the BASKET REBALANCING DAY on which CALCULATION DAY t falls
- w_{R-1}^i The WEEKLY WEIGHT of INDEX COMPONENT i as of the first BASKET REBALANCING DAY immediately preceding CALCULATION DAY t
- w_{R-2}^i the WEEKLY WEIGHT of INDEX COMPONENT i as of the second BASKET REBALANCING DAY immediately preceding CALCULATION DAY t
- w_{R-3}^i the WEEKLY WEIGHT of INDEX COMPONENT i as of the third BASKET REBALANCING DAY immediately preceding CALCULATION DAY t

On the first three BASKET REBALANCING DAYS, there is not enough history to calculate x_R^i according to the above formula. On these three BASKET REBALANCING DAYS, the average will be calculated as follow :

$$x_1^i = w_1^i$$

$$x_{2}^{i} = \frac{w_{1}^{i} + w_{2}^{i}}{2}$$
$$x_{3}^{i} = \frac{w_{1}^{i} + w_{2}^{i} + w_{3}^{i}}{3}$$

- x_1^i The Weight of INDEX COMPONENT i as of the first BASKET REBALANCING DAY
- x_2^i The Weight of INDEX COMPONENT i as of the second Basket Rebalancing Day
- x_3^i The Weight of INDEX COMPONENT i as of the third BASKET REBALANCING DAY
- **w**^{*i*} The WEEKLY WEIGHT of INDEX COMPONENT i as of the first BASKET REBALANCING DAY
- w_2^i the Weekly Weight of Index Component i as of the second Basket Rebalancing Day
- w_3^i the WEEKLY WEIGHT of INDEX COMPONENT i as of the third BASKET REBALANCING DAY

3.3. WEEKLY WEIGHTS CALCULATION

On each BASKET SELECTION DAY, a weekly weight (the "WEEKLY WEIGHT") is determined for each INDEX COMPONENT.

The WEEKLY WEIGHT of each INDEX COMPONENT on a BASKET SELECTION DAY (denoted by w_{BSD}^i) is calculated using forecasted/expected returns (denoted by $ERet_{BSD}^i$) and a confidence score (denoted by $Conf_{BSD}^i$), each as provided by EquBot in respect of each INDEX COMPONENT and each BASKET SELECTION DAY (see Section 4 of this GUIDELINE below).

On each BASKET SELECTION DAY as detailed below, if (i) the confidence score ($Conf_{BSD}^i$) in respect of an INDEX COMPONENT and such BASKET SELECTION DAY is below 0.55 or (ii) the normalized expected return (denoted NormERet_{BSD}^i and defined below) in respect of an INDEX COMPONENT and such BASKET SELECTION DAY is lower than 0, the WEEKLY WEIGHT of such INDEX COMPONENT on such BASKET SELECTION DAY is set at 0. Otherwise, the INDEX COMPONENTS are ranked according to their normalized expected return (NormERet_{BSD}^i) in respect of such BASKET SELECTION DAY where the INDEX COMPONENTS with highest and second highest normalized expected return will be assigned the highest WEEKLY WEIGHT (25%) in respect of such BASKET SELECTION DAY and the INDEX COMPONENT or INDEX COMPONENTS with lowest normalized expected return will be assigned a WEEKLY WEIGHT of 0% in respect of such BASKET SELECTION DAY.

In more detail, the following steps are performed to derive w_{BSD}^i from $ERet_{BSD}^i$ and $Conf_{BSD}^i$. The WEEKLY WEIGHT of each INDEX COMPONENT as determined on a BASKET SELECTION DAY will be used as the WEEKLY WEIGHT of each INDEX COMPONENT as of the BASKET REBALANCING DAY R immediately following such BASKET SELECTION DAY BSD ($w_R^i = w_{BSD}^i$):

- If either (i) $Conf_{BSD}^i < 0.55$ or (ii) $NormERet_{BSD}^i < 0$, then $w_{BSD}^i = 0$
- If $Conf_{BSD}^i \ge 0.55$ and $NormERet_{BSD}^i \ge 0$, then INDEX COMPONENTS are ranked according to their normalized expected return $NormERet_{BSD}^i$, such that the INDEX COMPONENTS with the highest and second highest $NormERet_{BSD}^i$ each receive a w_{BSD}^i of 25%, the INDEX COMPONENTS with the third and fourth highest $NormERet_{BSD}^i$ each receive a w_{BSD}^i of 15%, the INDEX COMPONENT with the fifth highest $NormERet_{BSD}^i$ receives a w_{BSD}^i of 10% and the INDEX COMPONENTS with the sixth and seventh highest $NormERet_{BSD}^i$ receives a w_{BSD}^i of 5%. The remaining Index Components will receive a w_{BSD}^i of 0%.
- The WEEKLY WEIGHT of INDEX COMPONENT 12 (w_{BSD}^{12}) is capped at 6.66% (the "CAP"). If INDEX COMPONENT 12 is ranked in the top five INDEX COMPONENTS in respect of its normalized expected return as of a BASKET SELECTION DAY and, if there was no CAP, would have received a WEEKLY WEIGHT which is higher than the CAP, the excess that such WEEKLY WEIGHT is above the CAP is redistributed across the other INDEX COMPONENTS that have a positive WEEKLY WEIGHT as of such BASKET SELECTION DAY in accordance with the following formula:

$$w^i_{BSD} = w^i_{BSD} * (1 + excess_w^{12}_{BSD}) \text{ if } : w^i_{BSD} > 0 \text{ and } : i \neq 12$$

Where:

 $excess_w_{BSD}^{12} = w_{BSD}^{12} - 0.0666$ if $w_{BSD}^{12} > 0.0666$

The normalized expected return ($denoted NormERet_{BSD}^{i}$) is defined as follows:

$$NormERet^{i}_{BSD} = ERet^{i}_{BSD} * E^{i}_{BSD}$$

With:

NormERet_{BSD}^iThe normalized expected return of INDEX COMPONENT i as of BASKET SELECTION DAY
BSD E_{BSD}^i The INDEX COMPONENT EXPOSURE of INDEX COMPONENT i as of BASKET
SELECTION DAY BSD. $ERet_{BSD}^i$ The forecasted/expected returns provided by EquBot in respect of INDEX COMPONENT
i and BASKET SELECTION DAY BSD.

3.4. CALCULATION OF INDIVIDUAL VOLATILITY-CONTROLLED LEVELS

The volatility-controlled level (the "Volatility-Controlled Level") of each INDEX COMPONENT i as of each Calculation Day t, denoted by VC_t^i , is calculated as follows:

If CALCULATION DAY t is equal to the VOL CONTROL START DAY:

 $VC_t^i = 100$

For each CALCULATION DAY t following the VOL CONTROL START DAY:

$$VC_{t}^{i} = VC_{t-1}^{i} * \left(1 + E_{t-1}^{i} * \left(\frac{TR_{t}^{i}}{TR_{t-1}^{i}} - 1\right) + \left(1 - E_{t-1}^{i}\right) * \left(\frac{C_{t}}{C_{t-1}} - 1\right) - TC * \left|E_{t}^{i} - E_{t-1}^{i}\right|\right)$$

Where:

VC_t^i	The Volatility-Controlled Level of Index Component i as of Calculation Day t
VC_{t-1}^i	The Volatility-Controlled Level of Index Component as of the Calculation Day immediately preceding Calculation Day t
E_t^i	The Index Component Exposure of Index Component i as of Calculation Day t
E_{t-1}^i	The INDEX COMPONENT EXPOSURE of INDEX COMPONENT as of the Calculation Day immediately preceding Calculation Day ${\rm t}$
TR_t^i	The Total Return Level of Index Component i as of the Calculation Day t
TR_{t-1}^i	The TOTAL RETURN LEVEL of INDEX COMPONENT i as of the Calculation Day immediately preceding Calculation Day t
C_t	The Cash Index Level as of Calculation Day t
C_{t-1}	The Cash Index Level as of the Calculation Day immediately preceding Calculation Day t
ТС	The transaction costs parameter of 0.02%

The total return level (the "TOTAL RETURN LEVEL") of each INDEX COMPONENT i is calculated depending on the INDEX COMPONENT TYPE of INDEX COMPONENT i as follows:

If the INDEX COMPONENT TYPE of INDEX COMPONENT i is "ETF", the TOTAL RETURN LEVEL of INDEX COMPONENT i as of each CALCULATION DAY t is calculated in accordance with the following formula:

$$TR_t^i = TR_{t-1}^i * \frac{CP_t^i + div_t^i}{CP_{t-1}^i}$$

Where:

 TR_t^i The TOTAL RETURN LEVEL of INDEX COMPONENT i as of the CALCULATION DAY t

 TR_{t-1}^{i} The TOTAL RETURN LEVEL of INDEX COMPONENT i as of the CALCULATION DAY immediately preceding CALCULATION DAY t

CP_t^i	The Closing Price of Index Component i as of the Calculation Day t
CP_{t-1}^i	The Closing Price of Index Component i as of the Calculation Day immediately preceding Calculation Day t
div _t ⁱ	The dividend amount paid in respect of INDEX COMPONENT i with an ex-date corresponding to

CALCULATION DAY t, as determined by the INDEX ADMINISTRATOR

Adjustments to the TOTAL RETURN LEVEL of INDEX COMPONENTS to account for corporate actions will be made in compliance with the Equity Index Methodology, which is available on the SOLACTIVE website: <u>https://www.solactive.com/documents/equity-index-methodology/</u>

If the INDEX COMPONENT TYPE of INDEX COMPONENT i is "Index", the TOTAL RETURN LEVEL of INDEX COMPONENT i as of each CALCULATION DAY t is calculated in accordance with the following formula

$$TR_{t}^{i} = TR_{t-1}^{i} * \left(1 + \left(\frac{CP_{t}^{i}}{CP_{t-1}^{i}} - 1 \right) + \left(\frac{C_{t}}{C_{t-1}} - 1 \right) \right)$$

Where:

TR_t^i	The Total Return Level of Index Component i as of the Calculation Day t		
TR_{t-1}^i	The Total Return Level of Index Component i as of the Calculation Day immediately preceding Calculation Day t		
CP_t^i	The Closing Price of Index Component i as of the Calculation Day t		
CP_{t-1}^i	The Closing Price of Index Component i as of the Calculation Day immediately preceding Calculation Day t		
C _t	The Cash Index Level as of Calculation Day t		
C_{t-1}	The CASH INDEX LEVEL as of the CALCULATION DAY immediately preceding CALCULATION DAY t		

The exposure (the "INDEX COMPONENT EXPOSURE") of each INDEX COMPONENT i as of each CALCULATION DAY t is calculated in accordance with the following formula:

$$E_{t}^{i} = \begin{cases} E_{t-1}^{i} \text{ if } \left| Target E_{t}^{i} - E_{t-1}^{i} \right| \leq rebalancingThreshold \\ Target E_{t}^{i} & otherwise \end{cases}$$

Where:

E_t^i	The Index Component Exposure of Index Component i as of Calculation Day t
$TargetE_t^i$	The Target Index Component Exposure of Index Component i as of Calculation Day t

 E_{t-1}^{i} The INDEX COMPONENT EXPOSURE of INDEX COMPONENT i as of the CALCULATION DAY immediately preceding CALCULATION DAY t

rebalancingThreshold The REBALANCING THRESHOLD of 10%

The target exposure (the "TARGET INDEX COMPONENT EXPOSURE") of each INDEX COMPONENT i as of each CALCULATION DAY t is calculated in accordance with the following formula:

$$TargetE_{t}^{i} = \min\left(MaxExp^{i}, \frac{TargetVol^{i}}{\sigma_{t-1}^{i}}\right)$$

Where:

$TargetE_t^i$	The Target Index Component Exposure of Index Component i as of Calculation Day t		
min	Whenever followed by a series of amounts inside brackets, whichever is the lesser of the amounts separated by a comma inside those brackets.		
MaxExp ⁱ	The maximum exposure of INDEX COMPONENT i as per the table at the end of this Section 3.4.		
TargetVol ⁱ	The level of target volatility of \ensuremath{INDEX} COMPONENT i as per the table at the end of this Section 3.4.		
σ_{t-1}^{i}	The INDEX COMPONENT REALIZED VOLATILITY of INDEX COMPONENT i as of the CALCULATION DAY immediately preceding CALCULATION DAY t		

The realized volatility (the "INDEX COMPONENT REALIZED VOLATILITY") of each INDEX COMPONENT i as of each CALCULATION DAY t is calculated according to:

 $\sigma_t^i = max(\sigma_{t,s}^i, \sigma_{t,l}^i)$

Where:

The INDEX COMPONENT REALIZED VOLATILITY of INDEX COMPONENT i as of CALCULATION DAY t
Whenever followed by a series of amounts inside brackets, whichever is the greater of the amounts separated by a comma inside those brackets.
The short-term volatility of INDEX COMPONENT i as of CALCULATION DAY t
The long-term volatility of INDEX COMPONENT i as of CALCULATION DAY t

The short-term and long-term volatilities of INDEX COMPONENT i as of CALCULATION DAY t are derived from their respective variances as in accordance with the following formulas:

$$\sigma_{t,s}^{i} = \sqrt{252 * Var_{t,s}^{i}}$$
$$\sigma_{t,l}^{i} = \sqrt{252 * Var_{t,l}^{i}}$$

The short-term and long-term variances of INDEX COMPONENT i as of each CALCULATION DAY t following the INDIVIDUAL VARIANCE START DAY are calculated in accordance with the following formulas:

$$Var_{t,s}^{i} = \lambda_{s} * Var_{t-1,s}^{i} + (1 - \lambda_{s}) * \left(log\left(\frac{TR_{t}^{i}}{TR_{t-1}^{i}}\right) \right)^{2}$$
$$Var_{t,l}^{i} = \lambda_{l} * Var_{t-1,l}^{i} + (1 - \lambda_{l}) * \left(log\left(\frac{TR_{t}^{i}}{TR_{t-1}^{i}}\right) \right)^{2}$$

Where:

$Var_{t,s}^i$	The short-term variance of INDEX COMPONENT i as of CALCULATION DAY ${\sf t}$		
$Var_{t,l}^i$	The long-term variance of INDEX COMPONENT i as of CALCULATION DAY t		
λ_s	0.94		
λ_l	0.97		
$Var_{t-1,s}^{i}$	The short-term variance of INDEX COMPONENT i as of the CALCULATION DAY immediately preceding CALCULATION DAY t		
$Var_{t-1,l}^{i}$	The long-term variance of INDEX COMPONENT i as of the CALCULATION DAY immediately preceding CALCULATION DAY t		
log	The natural logarithm to the basis of Euler's number e (~2.781)		
TR_t^i	The TOTAL RETURN LEVEL of INDEX COMPONENT i as of CALCULATION DAY t		
TR_{t-1}^i	The TOTAL RETURN LEVEL of INDEX COMPONENT i as of the Calculation Day immediately preceding Calculation Day t		

On the INDIVIDUAL VARIANCE START DAY, the long-term and short-term variance in respect of each INDEX COMPONENT i are incepted with a value equal to the Initial Variance set out in the table below corresponding to such INDEX COMPONENT.

Index Component	TargetVol ⁱ	MaxExp ⁱ	Initial Variance
INDEX COMPONENT 1	0.15	1	2.85134753595358E-05
INDEX COMPONENT 2	0.15	1	9.97229376422953E-05
INDEX COMPONENT 3	0.15	1	2.20002341582047E-04
INDEX COMPONENT 4	0.15	1	6.99311726417777E-05
INDEX COMPONENT 5	0.15	1	1.17021923445929E-04
INDEX COMPONENT 6	0.15	1	1.34252908838304E-04
INDEX COMPONENT 7	0.15	2	4.72610603312070E-07
INDEX COMPONENT 8	0.15	2	1.13747639055051E-05
INDEX COMPONENT 9	0.15	2	4.17033458832140E-06
INDEX COMPONENT 10	0.15	2	7.92273788339885E-07
INDEX COMPONENT 11	0.15	2	5.41356892252907E-06
INDEX COMPONENT 12	0.15	1	1.69823848764489E-06
INDEX COMPONENT 13	0.15	2	5.83147898987089E-06
INDEX COMPONENT 14	0.15	2	1.92249919499846E-05
INDEX COMPONENT 15	0.15	1	2.40434212513205E-04
INDEX COMPONENT 16	0.15	1	4.00847306353126E-04
INDEX COMPONENT 17	0.15	1	1.64009383589216E-04
INDEX COMPONENT 18	0.15	1	8.15037710837297E-05

3.5. RECALCULATION

The INDEX ADMINISTRATOR makes the greatest possible efforts to accurately calculate and maintain the INDEX. However, errors in the determination process may occur from time to time for a variety of reasons (internal or external) and therefore, cannot be completely ruled out in respect of the INDEX. The INDEX ADMINISTRATOR endeavors to correct all errors that have been identified within a reasonable period of time. The understanding of "a reasonable period of time" as well as the general measures to be taken are

generally depending on the underlying and is specified in the Solactive Correction Policy, which is incorporated by reference and available on the SOLACTIVE website: https://www.solactive.com/documents/correction-policy/.

3.6. MARKET DISRUPTION

In periods of market stress the INDEX ADMINISTRATOR shall calculate the INDEX following predefined and exhaustive arrangements as described in the Solactive Disruption Policy, which is incorporated by reference and available on the SOLACTIVE website: https://www.solactive.com/documents/disruption-policy/. Such market stress can arise due to a variety of reasons, but generally results in inaccurate or delayed prices for one or more INDEX COMPONENTS. The determination of the INDEX may be limited or impaired at times of illiquid or fragmented markets and market stress.

4. AI FORECASED RETURN AND CONFIDENCE SCORE

4.1. EQUBOT

EquBot Inc is a San Francisco (CA) based investment manager, a graduate of the IBM Global Entrepreneur Program, and is part of the With Watson Program. EquBot's mission is to give investors access to investment opportunities that Artificial Intelligence ("AI") can uncover. Using both proprietary technology and IBM Watson[®], EquBot designs investment strategies that utilize AI throughout the entire investment process. EquBot technology can combine both fundamental and quantitative analysis while formulating new investment insights through the use of AI. EquBot solutions utilize large amounts of data to build predictive financial models on over 15,000 globally traded companies. Along with being the owner of the Index, EquBot also manages several exchange-traded funds and manages dedicated mandates for institutional investors.

4.2. AI FORECASED RETURNS

In respect of each BASKET SELECTION DAY, EquBot computes the AI forecasted return ("Forecasted Return") of each INDEX COMPONENT. The Forecasted Return of an Index Component is its expected change in price over a 1-month horizon, relative to its current price.

4.3. AI CONFIDENCE SCORE

Confidence Scores range from 0 to 1 and indicate the level of certainty the system has in its forecasted price target. The inputs include current signal data, historical signal data, historical forecasts, and historical actual prices.

EquBot's system then measures the variability of the current signal data to all the historical (signal, forecasts, and prices) data to forecast a price target interval. The more similar the current data is with the historicals, then the tighter the price target interval. The less similar the current data is with the historicals, then the wider the price target interval.

The system then calculates the confidence score from how tight or wide the price target interval is.

The tighter the price target interval, then the higher the confidence score and the wider the interval the lower the confidence score.

5. MISCELLANEOUS

5.1. **DISCRETION**

Any discretion which may need to be exercised in relation to the determination of the INDEX shall be limited to (i) exercising routine judgement (in the expert view of the INDEX ADMINISTRATOR) in the administration of the INDEX rules, provided, however, that such routine judgment does not include deviations or alterations to the Index rules that are designed to improve the financial performance of the INDEX, (ii) correcting errors in the implementation of the rules or calculations made pursuant to the INDEX rules, or (iii) making an adjustment to respond to an unanticipated event outside of INDEX ADMINISTRATOR'S control, such as a stock split, merger, listing or delisting, nationalization, or insolvency, a disruption in the financial markets for specific assets or in a particular jurisdiction, regulatory compliance requirement, force majeure, or any other unanticipated event of similar magnitude and significance, in each case subject to sections 3.5 to 3.6 hereof.

5.2. METHODOLOGY REVIEW

The methodology of the INDEX is subject to regular review, at least annually. If a change in methodology has been identified as a result of such review (e.g. if the underlying market or economic reality has changed since the launch of the INDEX or if the present methodology is based on obsolete assumptions and factors and no longer reflects the reality as accurately, reliably and appropriately as before), such change will be made in accordance with the Solactive Methodology Policy_which is incorporated by reference and available on the SOLACTIVE website: https://www.solactive.com/documents/methodology-policy/_

Any such change in the methodology will be announced on the SOLACTIVE website under the Section "Announcement", which is available at https://www.solactive.com/news/announcements/.

5.3. CHANGES IN CALCULATION METHOD

The application by the INDEX ADMINISTRATOR of the method described in this document is final and binding. The INDEX ADMINISTRATOR 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 and financial or tax reasons may require changes to be made to this method. The INDEX ADMINISTRATOR 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. Any such changes or modifications made in respect of the INDEX in accordance with this Section 5.3 shall be made by the INDEX ADMINISTRATOR in accordance with its policies. Despite the modifications and changes, the INDEX ADMINISTRATOR will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.

5.4. TERMINATION

The INDEX ADMINISTRATOR shall make the greatest possible efforts to ensure the resilience and continued integrity of the INDEX over time. Where necessary, the INDEX ADMINISTRATOR shall follow a clearly defined and transparent procedure to adapt the INDEX methodology to account for changing underlying markets (see Section 5.2 "*Methodology Review*") in order to maintain continued reliability and comparability of the INDEX. Nevertheless, if no other options are available the orderly cessation of the INDEX may be indicated. This is usually the case when the underlying market or economic reality, which the INDEX is set to measure or to reflect, changes substantially and in a way not foreseeable at the time of inception of the INDEX, the Index methodology can no longer be applied coherently or the INDEX is no longer used as the underlying value for financial instruments, investment funds and financial contracts.

The INDEX ADMINISTRATOR has established and maintains clear guidelines on how to identify situations in which the cessation of an index is unavoidable, how stakeholders are to be informed and consulted and the procedures to be followed for a termination or the transition to an alternative index. Details are specified in the Solactive Termination Policy, which is incorporated by reference and available on the SoLACTIVE website: <u>https://www.solactive.com/documents/termination-policy/.</u>

5.5. OVERSIGHT

An oversight committee composed of staff from the INDEX ADMINISTRATOR and its subsidiaries (the "OVERSIGHT COMMITTEE") is responsible for decisions regarding any amendments to the rules of the INDEX. Any such amendment, which may result in an amendment of the GUIDELINE, must be submitted to the OVERSIGHT COMMITTEE for prior approval and will be made in compliance with the Methodology Policy, which is available on the SOLACTIVE website: https://www.solactive.com/documents/methodology-policy/.

6. DEFINITIONS

"BASKET REBALANCING DAY" is two CALCULATION DAYS after the BASKET SELECTION DAY.

"BASKET" is the ensemble of weighted volatility-controlled INDEX COMPONENTS as defined in Section 3.2

"BASKET SELECTION DAY" is every Friday. If Friday is not a CALCULATION DAY it is the immediately preceding Thursday

"BASKET START DAY" is 19th September 2006

"BENCHMARK REGULATION" shall have the meaning as defined in Section "Introduction".

"BMR" shall have the meaning as defined in Section "Introduction".

"CALCULATION DAY" is every weekday where the New York Stock Exchange (MIC: XNYS) and NASDAQ (XNAS) is open for general business

"CLOSING PRICE" is, in respect of each INDEX COMPONENT (except for INDEX COMPONENT 14) and a relevant day, the level as published by the EXCHANGE in respect of such INDEX COMPONENT on such relevant day. In respect of INDEX COMPONENT 14 and a relevant day, the "CLOSING PRICE" is the level as calculated and published by S&P Global/Markit (or any successor thereto, as determined by the INDEX ADMINISTRATOR) in respect of INDEX COMPONENT 14 on such relevant day.

"CASH INDEX LEVEL" shall have the meaning as defined in Section 3.2

"EXCHANGE" is, in respect of each INDEX COMPONENT (except for INDEX COMPONENT 14), the respective exchange specified in the column "Exchange" in the table at Section 2 in respect of such INDEX COMPONENT or such replacement exchange as selected by the INDEX ADMINISTRATOR in accordance with the provisions at Section 2.

"Excess Return Level" shall have the meaning as defined in Section 3.2

"EXPOSURE" shall have the meaning as defined in Section 3.1 and 3.4

"FEDERAL FUNDS RATE" is, in respect of any day, the Federal Funds (Effective) rate published in N.Y. Federal Reserve Statistical Release H.15(519) for such day, or such other recognized source used for the purpose of displaying such rate.

"GUIDELINE" shall have the meaning as defined in Section "Introduction".

"INDEX COMPONENT" is each of component as defined in Section 2.1.

"INDEX COMPONENT TYPE" is, in respect of each INDEX COMPONENT, the type specified in the column "Type" in the table at Section 2 in respect of such INDEX COMPONENT.

INDEX COMPONENT EXPOSURE

"INDEX" shall have the meaning as defined in Section "Introduction".

"INDEX ADMINISTRATOR" shall have the meaning as defined in Section "Introduction".

"INDIVIDUAL VARIANCE START DAY" is 8th September 2006

"LIVE DATE" shall have the meaning as defined in Section 1.3.

"OVERSIGHT COMMITTEE" shall have the meaning as defined in Section 5.5.

"RATE SWITCH DAY" is 2nd April 2018

"REALIZED VOLATILITY" shall have the meaning as defined in Section 3.1 and 3.4 $\,$

"SECURED OVERNIGHT FUNDING RATE" is, in respect of any day, the secured overnight financing rate published for such day by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator), on the website of the Federal Reserve Bank of New York, currently at http://www.newyorkfed.org, or any successor source.

"SOLACTIVE" shall have the meaning as defined in Section "Introduction".

"START DATE" shall have the meaning as defined in Section 1.3.

"TARGET EXPOSURE" shall have the meaning as defined in Section 3.1 and $3.4\,$

"VARIANCE START DAY" is 14^{th} November 2006

"VOL CONTROL START DAY" is 11th September 2006

CONTACT

Solactive AG German Index Engineering Platz der Einheit 1 60327 Frankfurt am Main Germany

 Fet.:
 +49 (0) 69 719 160 00

 Fax:
 +49 (0) 69 719 160 25

 Email:
 info@solactive.com

 Website:
 www.solactive.com

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