

# INDEX GUIDELINE

*AI POWERED US EQUITY ADJUSTED TOTAL RETURN INDEX*

*Version 1.0*

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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 AI Powered US Equity Adjusted Total Return Index (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 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 text uses defined terms which are formatted with "SMALL CAPS". Such Terms shall have the meaning assigned to them as specified in Section 6 (Definitions).*

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. SOLACTIVE strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for SOLACTIVE – 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 does not constitute a recommendation for capital investment and does not contain any assurance or opinion of SOLACTIVE regarding a possible investment in a financial instrument based on this INDEX.



# 1. INDEX SPECIFICATIONS

## 1.1. SCOPE OF THE INDEX

Category	Description
Asset Class	Equity
Strategy	<p>The Index tracks the price movements of a portfolio of shares selected by EquBot Inc. ("EQUBOT") from the constituents of the Solactive US Large &amp; Mid Cap Index ("the INDEX UNIVERSE") following a methodology based on artificial intelligence techniques, subject to certain allocation constraints.</p> <p>The selection of shares includes a tracking error constraint to cap the tracking error between the Index and the Solactive US 500 Index PR (the "BENCHMARK") at 2.6%.</p> <p>The Index is calculated as an adjusted return index. An adjustment factor of 5.0% p.a. (accrued on a daily basis) is deducted from the INDEX level.</p>
Regional Allocation	United States
Rebalancing Fee	0.01%
Rebalancing Frequency	Monthly

## 1.2. IDENTIFIERS AND PUBLICATION

The INDEX is published under the following identifiers:

Name	ISIN	Currency	Type	RIC	BBG ticker
AI Powered US Equity Adjusted Total Return Index	DE000SLODZD9	USD	AR*	.AIPEXAR	AIPEXAR

\* AR means that the Index is calculated as adjusted return Index as described in the Equity Index Methodology, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>

The INDEX is published on the website of the INDEX ADMINISTRATOR ([www.solactive.com](http://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 27/04/2006 (the "START DATE"), is 1000. Historical values from 14/07/2021 (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

The level of the INDEX is calculated on each CALCULATION DAY from 9:00 a.m. to 10:50 p.m. CET based on the TRADING PRICES on the EXCHANGES on which the INDEX COMPONENTS are listed. TRADING PRICES of INDEX COMPONENTS not listed in the INDEX CURRENCY are converted using the current Intercontinental Exchange (ICE) spot foreign exchange rate. Should there be no current TRADING PRICE for an INDEX COMPONENT, the later of: (i) the most recent CLOSING PRICE; or (ii) the last available TRADING PRICE for the preceding TRADING DAY is used in the calculation.

In addition to the intraday calculation, a closing level of the INDEX for each CALCULATION DAY is also calculated. This closing level is based on the CLOSING PRICES for the INDEX COMPONENTS on the respective EXCHANGES on which the INDEX COMPONENTS are listed. The CLOSING PRICES of INDEX COMPONENTS not listed in the INDEX CURRENCY are converted using the 04:00 p.m. London time WM Fixing quoted by Reuters. If there is no 04:00 p.m. London time WM Fixing quoted by Reuters for the relevant CALCULATION DAY, the last available 04:00 p.m. London time WM Fixing quoted by Reuters will be used for the closing level calculation.

### 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 EQUBOT.



## 2. INDEX SELECTION

On each SELECTION DAY, the INDEX ADMINISTRATOR and SELECTION PARTY will revise the composition of the INDEX. Initially, the SELECTION PARTY determines the INDEX UNIVERSE in accordance with Section 2.1. The INDEX UNIVERSE comprises all those financial instruments which fulfill the INDEX UNIVERSE REQUIREMENTS (as specified in Section 2.1) and will constitute a starting pool from which the components of the INDEX will be selected. Based on this INDEX UNIVERSE, the new composition of the INDEX will be determined by applying the rules outlined in Section 2.2.

Each new INDEX COMPONENT will be assigned a weight as described in Section 2.3.

### 2.1. INDEX UNIVERSE REQUIREMENTS

The INDEX UNIVERSE is comprised of all financial instruments which fulfill the below requirements (the “**INDEX UNIVERSE REQUIREMENTS**”):

Is a component of the *Solactive US Large & Mid Cap Index (ISIN: DE000SLA0Q62)*, on a given SELECTION DAY.

The determination of the INDEX UNIVERSE is fully rule-based and the INDEX ADMINISTRATOR cannot make any discretionary decisions.

### 2.2. SELECTION OF THE INDEX COMPONENTS

Based on the INDEX UNIVERSE, the initial composition of the INDEX as well as any selection for an ordinary rebalance is determined on the SELECTION DAY in accordance with the following rules (the “**INDEX COMPONENT REQUIREMENTS**”):

The selection rules are based on the quantitative methodology elaborated by EQUBOT and described in Section 2.2.2 through 2.2.4 below.

#### 2.2.1. EQUBOT

EQUBOT Inc is a San Francisco, CA based AI powered investment manager, a graduate of the IBM Global Entrepreneur Program, and is part of the with Watson Program. EQUBOT helps global investment professionals transform data into better outcomes. Using both proprietary AI technology and IBM Watson®, EQUBOT designs investment strategies that can 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 50,000 globally traded companies.



Along with being the owner of the Index, EQUBOT also manages exchange-traded funds and dedicated mandates for institutional investors.

## 2.2.2. AI SCORES

In respect of each SELECTION DAY, the following scores are computed for each share within the INDEX UNIVERSE: the AI Financial Score, the AI Management Score and the AI News Score (each, an "AI SCORE").

These scores range from 0 to 10 and aim to quantify the potential increase in the value of each share with respect to data specific to each score.

### Sources of Data

AI Financial Scores are based on signals collected since 1999, where available. The signals are sourced from financial statement data, forecasted financial data, and trading data. Natural language processing ("NLP"), powered by IBM Watson<sup>®</sup>, is used to extract the relevant signals from financial statements.

AI Management Scores are based on signals collected since 1999, where available. The signals are sourced from financial statement data and company management-specific news articles. NLP, powered by IBM Watson<sup>®</sup>, is used to extract the relevant signals from these sources.

AI News Scores are based on signals collected since 1999, where available. The signals are sourced from news articles and social media posts. NLP, powered by IBM Watson<sup>®</sup>, is used to extract the relevant signals from these sources.

The signals set forth in the Annex herein are used for the calculation of the AI SCORES. Data normalization and other techniques are applied to overcome missing and erroneous data issues.

### Deep Learning Model

For each AI SCORE, the signals in respect of each share within the INDEX UNIVERSE are subsequently inserted into a deep learning model. This is done independently for each AI SCORE, and the models are specific to each share. The models are formulated to estimate the future price of each share over a 1-month time horizon, relative to its current price.

### Calculation of AI SCORES

In respect of each Selection Day, the AI SCORE for each share within the INDEX UNIVERSE is calculated in accordance with the following formula:

$$AI\ Score_{i,s} = \frac{N_{i,s} - N_{min,s}}{N_{max,s} - N_{min,s}} \times 10$$





With:

$N_{i,s}$  = the future price of share  $i$ , expressed as a percentage of its current price, as estimated on Selection Day  $s$  by the model related to the relevant AI SCORE

$N_{min,s}$  = the theoretical minimum value of  $N_{i,s}$  in respect of such Selection Day across all shares within the Index Universe, assuming the  $N_{i,s}$  in respect of such Selection Day are normally distributed

$N_{max,s}$  = the theoretical maximum value of  $N_{i,s}$  in respect of such Selection Day across all shares within the Index Universe, assuming the  $N_{i,s}$  in respect of such Selection Day are normally distributed

### 2.2.3. OPPORTUNITY VALUE

In respect of each SELECTION DAY, the Opportunity Value for each share within the INDEX UNIVERSE is calculated as follows:

- 1) The "AGGREGATED AI SCORE" of each share within the Index Universe is equal to the product of the AI Financial Score, AI Management Score and AI News Score of the relevant share.
- 2) The Opportunity Value of each share within the Index Universe is then computed as the z-score of the AGGREGATED AI SCORE of the relevant share among the AGGREGATED AI SCORES of all the shares in respect of such Selection Day.

### 2.2.4. COMPONENT SELECTION

On each SELECTION DAY, the algorithm aims to select and assign weights to a subset of shares within the INDEX UNIVERSE in order to form the portfolio with the highest Opportunity Value under the allocation constraints set forth in section 2.3.

The INDEX ADMINISTRATOR has outsourced the selection of the INDEX COMPONENTS to the SELECTION PARTY. Such outsourcing has been made in accordance with the requirements of the BMR (Article 10 BMR).

The selection of the INDEX COMPONENTS is fully rule-based and the SELECTION PARTY cannot make any discretionary decision.

## 2.3. WEIGHTING OF THE INDEX COMPONENTS

On each SELECTION DAY each INDEX COMPONENT is assigned weight based on an AI algorithm which aims to form the portfolio with the highest Opportunity Value under the allocation constraints set forth below:



### 2.3.1 LIQUIDITY CONSTRAINT

- (i) Any INDEX COMPONENT with a TOTAL MARKET CAPITALIZATION (as given by FACTSET under the mnemonic P\_MARKET\_VAL\_SEC or its predecessor or successor, as applicable) in respect of such SELECTION DAY that is less than USD 2 billion shall be excluded from the selection;
- (ii) The weight in respect of each Index Component  $i$  shall be subject to the following cap:

$$Cap_{i,s} = \text{Min}(Cap, \alpha \times ADVTC_{i,s}, \beta \times ADVTP_{i,s})$$

With:

$$Cap = [7.50\%]$$

$$\alpha = [1/2,700,000,000 \times 15\% \times 3]$$

$$\beta = [1/2,700,000,000 \times 50\% \times 3]$$

$ADVTC_{i,s}$  = the AVERAGE DAILY TRADED VALUE over the 20 TRADING DAYS period ending on SELECTION DAY  $s$  across all exchanges on which INDEX COMPONENT  $i$  is listed (as given by Factset under the mnemonic XP\_AGG\_VOLUME or its predecessor or successor, as applicable)

$ADVTP_{i,s}$  = the AVERAGE DAILY TRADED VALUE over the 20 Trading Days period ending on Selection Day  $s$  on the primary exchange on which INDEX COMPONENT  $i$  is listed on the close (as given by Factset under the mnemonic XP\_VOLUME\_CLOSE or its predecessor or successor, as applicable) or, if such data is not available,  $[10\%] \times ADVTC_{i,s}$

The excess weight that results from implementing these constraints shall be allocated into the i-Shares 1-3 Year Treasury Bond ETF (SHY UP Equity).

### 2.3.2 TRACKING ERROR CONSTRAINT

The ex-ante tracking error (the "TRACKING ERROR") between INDEX COMPONENTS and the constituents of the Benchmark (the "BENCHMARK COMPONENTS") may not exceed 2.60%.

The tracking error universe (the "TEU") on any SELECTION DAY will be the union of (i) the BENCHMARK COMPONENTS, and (ii) the INDEX COMPONENTS. Any duplicates in the TEU will be removed.

The TRACKING ERROR will be computed using the following formula:

$$TE_s = \sqrt{(X_s - B_s) \cdot Cov_s \cdot (X_s - B_s)^T}$$

Where:



$X_s$  = the vector of weights representing the TEU such that: any name that is an INDEX COMPONENT will be represented with its weight from EQUBOT in respect of each SELECTION DAY  $s$ ; and any other name will be represented with a weight of zero.

$B_s$  = the vector of weights representing the TEU such that: any name that is in the BENCHMARK COMPONENTS will be represented with its weight in the BENCHMARK in respect of each SELECTION DAY  $s$ ; and any other name will be represented with a weight of zero.

The notation “.” denotes the matrix product

The notation “  $T$ ” denotes the transpose of a vector

$Cov_s$  = the annualized covariance matrix of all the components of the TEU

The annualized covariance between component<sub>(i)</sub> and component<sub>(k)</sub>, in the TEU, is calculated according to the following formula:

$$COV_{i,k} = \frac{252}{(L-1)} \times \sum_{n=0}^{L-1} \left( \left[ \left( \frac{P_{i,s-n} + D_{i,s-n}}{P_{i,s-n-1}} - 1 \right) - \bar{R}_i \right] \times \left[ \left( \frac{P_{k,s-n} + D_{k,s-n}}{P_{k,s-n-1}} - 1 \right) - \bar{R}_k \right] \right)$$

With:

$$\bar{R}_i = \frac{1}{L} \times \sum_{n=0}^{L-1} \left( \frac{P_{i,s-n} + D_{i,s-n}}{P_{i,s-n-1}} - 1 \right) \quad \text{and} \quad \bar{R}_k = \frac{1}{L} \times \sum_{n=0}^{L-1} \left( \frac{P_{k,s-n} + D_{k,s-n}}{P_{k,s-n-1}} - 1 \right)$$

$L$ , is the length of relevant covariance observation period and is equal to 126 CALCULATION DAYS.

$n$ , refers to each CALCULATION DAY within the relevant covariance observation period.

$P_{i,s-n}$  = the CLOSING PRICE of component  $i$  in respect of CALCULATION DAY  $s-n$

$P_{i,s-n-1}$  = the CLOSING PRICE of component  $i$  in respect of the CALCULATION DAY immediately preceding CALCULATION DAY  $s-n$

$P_{k,s-n}$  = the CLOSING PRICE of component  $k$  in respect of CALCULATION DAY  $s-n$

$P_{k,s-n-1}$  = the CLOSING PRICE of component  $k$  in respect of the CALCULATION DAY immediately preceding CALCULATION DAY  $s-n$

$Div_{i,s-n}$  = the aggregate amount of dividends for component  $i$  with an ex-dividend date falling in the period from, but excluding, the CALCULATION DAY immediately preceding CALCULATION DAY  $s-n$  to, to and including, CALCULATION DAY  $s-n$

$Div_{k,s-n}$  = the aggregate amount of dividends for component  $k$  with an ex-dividend date falling in the period from, but excluding, the CALCULATION DAY immediately preceding CALCULATION DAY  $s-n$  to, to and including, CALCULATION DAY  $s-n$



If the TRACKING ERROR defined above exceeds 2.6%, then a MODIFIED INDEX COMPOSITION and MODIFIED SELECTION WEIGHTS will be computed by the INDEX ADMINISTRATOR as follows:

$$X_s^{mod} = (1 - w) \times X_s + w \times B_s ,$$

Where:

$X_s^{mod}$  is the vector of MODIFIED SELECTION WEIGHTS.

$X_s$  is the vector of weights in respect of SELECTION DAY  $s$  as defined above

$B_s$  is the vector of weights in respect of SELECTION DAY  $s$  as defined above

$w$  is equal to 2%

If the TRACKING ERROR defined above using the MODIFIED SELECTION WEIGHTS is still above 2.6% then: The INDEX ADMINISTRATOR shall recompute the MODIFIED SELECTION WEIGHTS with  $w$  equal to 4%. The process will be repeated, with  $w$  being increased in steps of 2% each time, until the TRACKING ERROR using the Modified Selection Weights falls below 2.6%.

## 2.4. DISCONTINUATION OF THE SELECTION PROCESS

In the event that EQUBOT is no longer be able to compute or communicate the selection of INDEX COMPONENTS and their weights to the INDEX ADMINISTRATOR, the INDEX would instead be composed of a unique INDEX COMPONENT with a weight of 100% (that shall not be subject to the allocation constraints described in section 2.2). Such INDEX COMPONENT shall be the SPDR S&P 500 ETF Trust (SPY UP).



## 3. REBALANCE

### 3.1. ORDINARY REBALANCE

In order to reflect the new selection of the INDEX COMPONENTS determined on the SELECTION DAY (in accordance with Section 2.1 and 2.2) the INDEX is adjusted on the REBALANCE DAY after CLOSE OF BUSINESS.

This is carried out by implementing the weights as determined on the SELECTION DAY.

For more information on the rebalance procedure, please refer to Multiday Index Rebalance in a Standard Index in the Equity Index Methodology, which is incorporated by reference and available on the Solactive website: <https://www.solactive.com/documents/equity-index-methodology/>.]

The INDEX is rebalanced over the REBALANCE PERIOD to downsize rebalance transactions in accordance with the Equity Index Methodology.

On each REBALANCE DAY there is a 0.01% rebalancing fee subtracted from the INDEX level based on the total absolute change in the weights of each financial instrument entering or leaving the INDEX. The rebalancing fee will be applied in compliance with the Solactive Equity Index Methodology, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>.

SOLACTIVE will publish any changes made to the INDEX COMPONENTS with sufficient notice before the REBALANCE DAY on the SOLACTIVE website under the section "Announcement", which is available at <https://www.solactive.com/news/announcements/>.

### 3.2. EXTRAORDINARY REBALANCE

The INDEX is not rebalanced extraordinarily.



## 4. CALCULATION OF THE INDEX

### 4.1. INDEX FORMULA

The INDEX is calculated as an adjusted return Index.

The calculation is performed according to the Equity Index Methodology, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>. The standard index formula stipulates that the level of the INDEX changes based on the change of the prices of its INDEX COMPONENTS taking into account their weight in the INDEX and any currency conversion in case the price of an INDEX COMPONENT is quoted in a currency other than the INDEX CURRENCY.

Any dividends or other distributions are reinvested back into the INDEX COMPONENT paying the dividend or other distribution at the opening of the effective date (the so called ex-date) of the payment of such dividend or other distribution.

For the construction of the adjusted return version, a decrement of 5% per annum is deducted on each INDEX CALCULATION DAY from the gross total return index version. The decrement will be applied in compliance with the Equity Index Methodology indicated above.

### 4.2. ACCURACY

The level of the INDEX will be rounded to 2 decimal places. TRADING PRICES and foreign exchange rates will be rounded to six decimal places.

### 4.3. ADJUSTMENTS

Under certain circumstances, an adjustment of the INDEX may be necessary between two regular REBALANCE DAYS. Such adjustment has to be made if a corporate action (as specified in Section 4.4 below) in relation of an INDEX COMPONENT occurs. Such adjustment may have to be done in relation to an INDEX COMPONENT and/or may also affect the number of INDEX COMPONENTS and/or the weighting of certain INDEX COMPONENTS and will be made in compliance with the Equity Index Methodology, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>.

SOLACTIVE will announce the INDEX adjustment giving a notice period of at least two TRADING DAYS (with respect to the affected INDEX COMPONENT) on the SOLACTIVE website under the Section "Announcements", which is available at <https://www.solactive.com/news/announcements/>. The INDEX adjustments will be implemented on the effective day specified in the respective notice.



## 4.4. CORPORATE ACTIONS

As part of the INDEX maintenance SOLACTIVE will consider various events – also referred to as corporate actions – which result in an adjustment to the INDEX. Such events may have a material impact on the price, weighting or overall integrity of INDEX COMPONENTS. Therefore, they need to be accounted for in the calculation of the INDEX. Corporate actions will be implemented from the cum-day to the ex-day of the corporate action, so that the adjustment to the INDEX coincides with the occurrence of the price effect of the respective corporate action.

Adjustments to the INDEX to account for corporate actions will be made in compliance with the Equity Index Methodology, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>. This document contains an exemplary, but not total, list of corporate actions and a brief definition and specifies the relevant adjustment to the INDEX variables.

While SOLACTIVE aims at creating and maintaining its methodology for treatment of corporate actions as generic and transparent as possible and in line with regulatory requirements, it retains the right in accordance with the Equity Index Methodology to deviate from these standard procedures in case of any unusual or complex corporate action or if such a deviation is made to preserve the comparability and representativeness of the INDEX over time.

SOLACTIVE considers the following non-exclusive list of corporate actions as relevant for INDEX maintenance (without limiting the generality thereof):

- > Cash Distributions (e.g. payment of a dividend)
- > Stock distributions (e.g. payment of a dividend in form of additional shares)
- > Stock distributions of another company (e.g. payment of a dividend in form of additional shares of another company (e.g. of a subsidiary))
- > Share splits (company's present shares are divided and therefore multiplied by a given factor)
- > Reverse splits (company's present shares are effectively merged)
- > Capital increases (such as issuing additional shares)
- > Share repurchases (a company offer its shareholders the option to sell their shares to a fixed price)
- > Spin-offs (the company splits its business activities into two or more entities and distributes new equity shares in the created entities to the shareholders of the former entity)
- > Mergers & Acquisitions (transaction in which the ownership of a company (or other business organizations) are transferred or consolidated with other entities, e.g. fusion of two or more separate companies into one entity)
- > Delistings (company's shares are no longer publicly traded at a stock exchange)
- > Nationalization of a company (effective control of a legal entity is taken over by a state)



> Insolvency

## 4.5. RECALCULATION

SOLACTIVE makes the greatest possible efforts to accurately calculate and maintain its indices. However, errors in the determination process may occur from time to time for variety reasons (internal or external) and therefore, cannot be completely ruled out. SOLACTIVE 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/>.

## 4.6. MARKET DISRUPTION

In periods of market stress SOLACTIVE calculates its indices 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.





## 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 judgment (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 rules, or (iii) making an adjustment to respond to an unanticipated event outside of Solactive'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, subject to sections 4.3 through 4.6 hereof.

### 5.2. METHODOLOGY REVIEW

The methodology of the INDEX is subject to regular review, at least annually. In case a need of a change of the methodology has been identified within such review (e.g. if the underlying market or economic reality has changed since the launch of the INDEX, i.e. 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/>.

Such change in the methodology will be announced on the SOLACTIVE website under the Section "[Announcement](https://www.solactive.com/news/announcements/)", which is available at <https://www.solactive.com/news/announcements/>. The date of the last amendment of this INDEX is contained in this GUIDELINE.

### 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. The INDEX ADMINISTRATOR is not obliged to provide information on any such modifications or changes. 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

SOLACTIVE makes the greatest possible efforts to ensure the resilience and continued integrity of its indices over time. Where necessary, SOLACTIVE follows a clearly defined and transparent procedure to adapt Index methodologies to changing underlying markets (see Section 5.2 "Methodology Review") in order to maintain continued reliability and comparability of the indices. 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 an 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 rules, and particularly the selection criteria, 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.

SOLACTIVE 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: <https://www.solactive.com/documents/termination-policy/>.

## 5.5. OVERSIGHT

An oversight committee composed of staff from SOLACTIVE 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

“**AVERAGE DAILY VALUE TRADED**” means, in respect of an INDEX COMPONENT, the sum of DAILY VALUE TRADED over the specified period divided by the number of TRADING DAYS that fall in the specified period.

“**BENCHMARK**” means the Solactive US 500 Index PR (ISIN: DE000SLA0Q54).

“**BENCHMARK REGULATION**” shall have the meaning as defined in Section “Introduction”.

“**BENCHMARK COMPONENTS**” means in respect of a Selection Day the constituents of the Benchmark.

“**BMR**” shall have the meaning as defined in Section “Introduction”.

“**CALCULATION DAY**” is every weekday from Monday to Friday when the New York Stock Exchange (NYSE) is open for general business.

“**CLOSE OF BUSINESS**” is the calculation time of the closing level of the INDEX as outlined in Section 1.4.

The “**CLOSING PRICE**” in respect of an INDEX COMPONENT and a TRADING DAY is a security's final regular-hours TRADING PRICE published by the EXCHANGE and determined in accordance with the EXCHANGE regulations. If the EXCHANGE has no or has not published a CLOSING PRICE in accordance with the EXCHANGE rules for an INDEX COMPONENT, the last TRADING PRICE will be used.

“**DAILY VALUE TRADED**” means, in respect of an INDEX COMPONENT and a TRADING DAY, the product of (i) the CLOSING PRICE of such INDEX COMPONENT and (ii) the volume traded (measured as a number of shares) of such INDEX COMPONENT on the EXCHANGE during such TRADING DAY.

“**ELIGIBLE REBALANCE DAY**” is each day that is a TRADING DAY at the New York Stock Exchange.

“**EXCHANGE**” is with respect to the INDEX and every INDEX COMPONENT, the respective exchange where the INDEX COMPONENT has its listing as determined in accordance with the rules in Section 2.

“**FACTSET**” means FactSet Research Systems Inc.

“**GUIDELINE**” shall have the meaning as defined in Section “Introduction”.

“**INDEX**” shall have the meaning as defined in Section “Introduction”.

“**INDEX ADMINISTRATOR**” shall have the meaning as defined in Section “Introduction”.

“**INDEX COMPONENT**” is each security reflected in the INDEX.

“**INDEX COMPONENT REQUIREMENTS**” shall have the meaning as defined in Section 2.2.

“**INDEX CURRENCY**” is the currency specified in the column “Currency” in the table in Section 1.2.

“**INDEX UNIVERSE REQUIREMENTS**” shall have the meaning as defined in Section 2.1.

“**INDEX UNIVERSE**” is the sum of all financial instruments which fulfill the INDEX UNIVERSE REQUIREMENTS.

“**LIVE DATE**” shall have the meaning as defined in Section 1.3.

“**MODIFIED INDEX COMPOSITION**” shall have the meaning as defined in Section 2.2.2.



“**MODIFIED SELECTION WEIGHTS**” shall have the meaning as defined in Section 2.2.2.

“**OVERSIGHT COMMITTEE**” shall have the meaning as defined in Section 5.5.

“**REBALANCE DAY**” is the second to last CALCULATION DAY of each month.

“**REBALANCE PERIOD**” is the period starting from (and including) the REBALANCE DAY until and (including) the immediately following 2 CALCULATION DAYS. For the avoidance of doubt, THE REBALANCE PERIOD lasts a total of 3 CALCULATION DAYS.

“**SELECTION DAY**” is 3 CALCULATION DAYS prior to the REBALANCE DAY.

“**SELECTION PARTY**” is **EQUBOT**.

“**SOLACTIVE**” shall have the meaning as defined in Section “Introduction”.

“**START DATE**” shall have the meaning as defined in Section 1.3.

“**TOTAL MARKET CAPITALIZATION**” is with regard to each of the securities in the INDEX on a SELECTION DAY the sum of all SHARE CLASS MARKET CAPITALIZATIONS of a company.

“**TRADING DAY**” is with respect to an INDEX COMPONENT included in the INDEX at the REBALANCE DAY and every INDEX COMPONENT included in the INDEX at the CALCULATION DAY immediately following the REBALANCE DAY (for clarification: this provision is intended to capture the TRADING DAYS for the securities to be included in the INDEX as new INDEX COMPONENTS with close of trading on the relevant EXCHANGE on the REBALANCE DAY) a day on which the relevant EXCHANGE is open for trading (or a day that would have been such a day if a market disruption had not occurred), excluding days on which trading may be ceased prior to the scheduled EXCHANGE closing time and days on which the EXCHANGE is open for a scheduled shortened period. The INDEX ADMINISTRATOR is ultimately responsible as to whether a certain day is a TRADING DAY.

The “**TRADING PRICE**” in respect of an INDEX COMPONENT and a TRADING DAY is the most recent published price at which the INDEX COMPONENT was traded on the respective EXCHANGE.



## ANNEX

Table 1. AI Financial Score signals and data sources

ID	Signal	Primary Data Source
1	Sales/Revenue	Financial Statement
2	COGS	Financial Statement
3	R&D Expense	Financial Statement
4	SG&A Expense	Financial Statement
5	Depreciation & Amortization	Financial Statement
6	Interest Expense	Financial Statement
7	Non-Operating Income/Loss	Financial Statement
8	Income Taxes	Financial Statement
9	Minority Interest in Earnings	Financial Statement
10	Other Income (Loss)	Financial Statement
11	Ext. Items & Disc. Ops.	Financial Statement
12	Preferred Dividends	Financial Statement
13	Operating Cash and Market. Sec.	Financial Statement
14	Receivables	Financial Statement
15	Inventories	Financial Statement
16	Other Current Assets	Financial Statement
17	PP&E (Net)	Financial Statement
18	Investments	Financial Statement
19	Intangibles	Financial Statement
20	Other Assets	Financial Statement
21	Current Debt	Financial Statement
22	Accounts Payable	Financial Statement
23	Income Taxes Payable	Financial Statement



24	Other Current Liabilities	Financial Statement
25	Long-Term Debt	Financial Statement
26	Other Liabilities	Financial Statement
27	Deferred Taxes	Financial Statement
28	Minority Interest	Financial Statement
29	Preferred Stock	Financial Statement
30	Paid in Common Capital (Net)	Financial Statement
31	Retained Earnings	Financial Statement
32	Common Dividends	Financial Statement
33	EBITDA	Financial Statement
34	EPS	Financial Statement
35	Analyst Forecast on Earning (EPS)	Third Party Data Provider of forecasted financial data
36	Analyst Growth forecast	Third Party Data Provider of forecasted financial data
37	Last Trading Prices	Third Party Data Provider of trading data
38	Trading Volume	Third Party Data Provider of trading data
39	Relative Strength Index	Third Party Data Provider of trading data
40	52 Week High	Third Party Data Provider of trading data
41	52 Week Low	Third Party Data Provider of trading data
42	Open Price	Third Party Data Provider of trading data



Table 2. AI Management Score signals and data sources

ID	Signal	Primary Data Source
1	Management Compensation	Financial Statement
2	Net Sales Growth	Third Party Data Provider of forecasted financial data
3	Expense Growth	Third Party Data Provider of forecasted financial data
4	Geo Expansion	Third Party Data Provider of forecasted financial data
5	Profit Growth	Third Party Data Provider of forecasted financial data
6	ROA	Third Party Data Provider of forecasted financial data
7	Credit Rating	Third Party Data Provider of forecasted financial data
8	Earnings Surprise	Third Party Data Provider of forecasted financial data
9	ROE	Third Party Data Provider of forecasted financial data
10	Community Engagement	Public websites
11	Product Launch	Public websites
12	Headcount Growth	Public websites
13	ESG	Public websites
14	Innovation spend	Public websites
15	Customer Satisfaction	Public websites
16	Customer LTV	Public websites
17	Leadership Influence	Public websites



Table 3. AI News Score signals and data sources

ID	Signal Classification	Primary Data Source
1	News Sentiment	Public Websites
2	Headline Frequency	Public Websites
3	Social Med Sentiment	Public Websites
4	Media Engagement	Public Websites
5	Legal Involvement	Public Websites
6	Production loss	Public Websites
7	Earnings Revision	Public Websites
8	Crisis Response	Public Websites
9	Regulatory Changes	Public Websites
10	Natural Disaster	Public Websites
11	Customer sentiment	Public Websites
12	New Products	Public Websites
13	Strategic Partnership	Public Websites
14	M&A Detail	Public Websites
15	Correlated Company Sentiment	Public Websites



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