

INDEX GUIDELINE

Solactive Sharing Economy Index

Version 1.0

01 November 2018

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Think before you print!



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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 Solactive Sharing Economy 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. 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 Solactive Sharing Economy Index (the "Index") is an Index of Solactive AG and is calculated and distributed by Solactive AG.
- > The Index intends to track the price movements of a variable basket of shares of companies active in the "sharing economy" as specified in this document.
- > The Index is a Gross Total Return index (dividend payments and other distributions are included in the Index) / Price Return/Net Total Return. For the Price Return Index special cash distributions are reinvested gross of tax.
- > The Index is calculated and published in USD.

1.1 SHORT NAME AND ISIN

The Index is distributed under:

Index Name	ISIN	WKN	Reuters	Characteristic
Solactive Sharing Economy Index (PR)	DE000SLA64A0	SLA64A	.SOLSHARP	Price Return
Solactive Sharing Economy Index (NTR)	DE000SLA64B8	SLA64B	.SOLSHARN	Net Total Return
Solactive Sharing Economy Index (TR)	DE000SLA64C6	SLA64C	.SOLSHART	Total Return

1.2 INITIAL VALUE

The Index is based on 1000 at the close of trading on the Start Date, November 13, 2018.

1.3 DISTRIBUTION

The Index is published via the price marketing services of Boerse Stuttgart GmbH and is distributed to all its affiliated vendors. Each vendor decides on an individual basis as to whether it will distribute/display the Index via its information systems. In the event that data cannot be provided to the pricing services of Boerse Stuttgart GmbH the Index cannot be distributed.

1.4 PRICES AND CALCULATION FREQUENCY

The value 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 converted using spot foreign exchange rates quoted by Reuters. Should there be no current price for an Index Component or no current spot foreign exchange rate available on Reuters, the most recent foreign spot exchange rate and the most recent price or the Trading Price on Reuters for the preceding Trading Day is used in the calculation. The daily Index Closing Level is calculated using Reuters/WMCO closing spot rates as at 4pm London time.

The Index is calculated every Business Day from 9:00 a.m. to 10:30 p.m., CET.



1.5 WEIGHTING

On each Selection Day, the Index Components are equally weighted. The shares are adjusted for corporate actions between the Selection Day and the Adjustment Day as defined in Section 3.5. This only relates to corporate actions that have a direct impact on price and shares (i.e., Share Splits, Stock Distributions and rights issues – Section 3.5).

1.6 OVERSIGHT

A committee composed of staff from Solactive AG and its subsidiaries (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.

1.7 PUBLICATION

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

1.8 HISTORICAL DATA

Historical data will be maintained from the launch of the Index on November 13, 2018.

1.9 LICENSING

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

2 COMPOSITION OF THE INDEX

2.1 SELECTION OF THE INDEX COMPONENTS

2.1.1 SELECTION PROCESS

The initial composition of the Index as well as any ongoing adjustment are based on the following non-discretionary rules:

On the Selection Days, Solactive AG defines the Index Universe as outlined in Section 4. The selection of the Index Components proceeds as follows:

1. Size Filter:

Securities in the Index Universe are sorted by Free Float Market Capitalization in descending order. All securities with Free Float Market Capitalization higher than USD 500 million qualify for the next step.

2. Liquidity Filter:



Securities with a 6-month Average Daily Value Traded exceeding USD 2 million will be eligible for inclusion, provided that for a company, only the security with the highest 6-month Average Daily Value Traded will be considered.

3. Selection Criteria

Securities qualifying from the prior steps are added as Index Constituents if they fulfill at least one of the following selection criteria set out under the subheadings "Selection Criteria 1", "Selection Criteria 2" and "Selection Criteria 3" below. The relevant data, on which the selection is based, is derived from the Solactive Sharing Economy Research which is proprietary research data compiled by Solactive AG and distributed internally and to the relevant parties. The data is owned, managed and archived by Solactive AG.

Selection Criteria 1:

These criteria are intended to identify companies that invest significantly in private companies active in the sharing economy sector.

The investing companies are called "INVESTOR".

The private companies are called "INVESTEES". The INVESTEES eligible for the screening belong(s) to the categories as defined in Table 1 in the column "Categories". Only a limited number of companies per category is screened. The number of companies screened per category is defined in Table 1 in the column "Companies INVESTEES". It is based on the funding amount in descending order. If an INVESTEES provides an IPO (initial public offering) of a security, the corresponding security is added as an Index Component, provided that it fulfills the Size Filter and Liquidity Filter (Section 2.1). The additional criteria regarding the inclusion of such a security and the impact on the index constituents are described below in Section 2.1.2 "Buffer Rules for IPOs".

Categories	Companies INVESTEES
Coworking	Top 10
Hospitality	Top 5
Open Source	Top 5
Ride Sharing	Top 15
Peer to peer	Top 10
Automotive and Analytics	Top 5

Table 1: The categories and the corresponding number of companies in each one of them. More details about the categories' definitions are available in the Solactive Sharing Economy Research

The security(ies) of the INVESTOR(s) are included in the Index if one of the following criteria a) or b) are fulfilled:



- a) Funding contribution by an INVESTOR to a funding round launched by an INVESTEE meeting the following minimum requirements:
- (i) direct funding by INVESTOR exceeding USD 500 million; or
 - (ii) INVESTOR is an investment lead with a post valuation of the INVESTEE exceeding USD 1 billion and total round funding exceeding USD 1 billion; or
 - (iii) INVESTOR is an investment lead with a post valuation of the INVESTEE exceeding USD 1 billion and acquiring more than 10% stake in the company by the lead investor;
- or
- b) Acquisition by an INVESTOR of an INVESTEE with a valuation value exceeding USD 1 billion.

Selection Criteria 2:

These criteria are intended to identify companies active in the sharing economy as specified according to Table 2. An eligible company should be classified in an industry which belongs to the Solactive Sharing Economy Industry Classification as mentioned in the first column of Table 2, and fulfill the corresponding criteria defined in column "Criteria" and "Acceptance Value" of Table 2. The screening is based on Solactive Sharing Economy Research.

Solactive Sharing Economy Industry Classification	Criteria	Acceptance Value (Or logic from one value to another)
Hotel Chains Travel Agencies	Providing hospitality short stays by listing a number of private properties for rent, provided that Acceptance Value 1 or 2 are observed	1. Number of private (individual sharing his/her living place) properties listed is greater than 10,000; or 2. Number of luxury (if positioned and marketed as distinctive and upmarket properties by the service provider) private (individual sharing his/her living place) properties listed is greater than 500 or more than one luxury housing hospitality brand;
	Providing Taxi services by joining private drivers with clients on-	1. Number of rides serviced per year is greater than 50 ,000; or



Car Builders	demand, provided that Acceptance Value 1 is observed; or Providing Car Sharing services by establishing a network of cars to be shared, provided that Acceptance Value 2 or 3 are observed;	2. Size of car sharing fleet is greater than 500 vehicles; or 3. Car Sharing fleet available in more than 10 cities and with more than a total of one million customers globally; or 4. Number of autonomous vehicles deployed for public is greater than 100;
Car Leasing	or Providing Autonomous Cars fleet servicing people provided that Acceptance Value 4 is observed	
OS Developers	Providing open source software related to the kernel of the OS or other desktop applications, provided that Acceptance Value 1 or 2 are observed; or Providing open source database server engine and related applications, provided that Acceptance Value 3 is observed	1. Providing at least one open source OS; or 2. Providing at least one open source developer kit, editor or compiler relevant to the OS; or 3. Providing at least one open source database server;
Database Developers		

Table 2: Criteria for including listed companies active in the Sharing Economy

Selection Criteria 3:

These criteria are intended to identify companies eligible for inclusion in the Index that are active in the industries defined in Table 3:

Solactive Sharing Economy Industry Classification

Media Streaming
Food Delivery
Documents Sharing and Management

Table 3: List of relevant industries

Buffer Rules for IPOs

- 1.1 An equity security of a company from the list of private companies qualifying as INVESTEE and identified according to Table 1 is added as Index Constituent after its initial public offering IPO, provided that it is part of the Index Universe and meets the requirements stipulated in step 1 and 2 (Size and Liquidity Filters) above
- 1.2 The corresponding INVESTORS which are currently Index Constituents identified in accordance with Criteria 1 above will be removed from the Index if the corresponding INVESTEE provides an initial public offering IPO.
- 1.3 If removing an INVESTOR would lead to a number of index constituents below 25, the INVESTOR remains an Index Constituent. If there is more than one INVESTOR to be removed leading to the new number of Index Constituents being below 25, the INVESTORS with the largest Free Float Market Capitalization remain as Index Constituents.



- 1.4 At all time, the number of Index Constituents shall be at least 25. In the case of an exceptional situation caused by unavailability of data or tradability of the constituents that would lead to a number of Index Constituents not meeting the minimum requirement, the Index Committee would decide on the rules to be adopted during the next Selection Day.

2.1.2 FALLBACK SCENARIO

As a fallback scenario, in case the data is not available one day prior to the Selection Day, the Solactive Sharing Economy Research from Friday immediately preceding the Selection Date will be used.

In case of data unavailability, the research data from the immediately preceding Selection Date is used until an alternative source is presented to and approved by the Index Committee. Solactive cannot enforce or guarantee the continuity or availability of publicly announced information, and thus the definition of fallback scenarios. The IPO reviews in accordance with Section 2.2 and Buffer Rules for IPOs in accordance with Section 2.1.1 still apply in case of a fallback scenario.

2.1.3 EXECUTIVE SUMMARY OF THE SOLACTIVE SHARING ECONOMY RESEARCH

The intention of the research is to track companies active in the Sharing Economy. This economy is a modern way of utilizing resources by sharing them among the active agents in the economy. In particular, the intention is to track companies providing/facilitating a Sharing Activity defined as sharing a ride (or a car), a private property (for leisure or business purposes), a co-working space, and providing a peer-to-peer lending service. Some of the companies and their main competitors are private and provide for strategic investment opportunities of established companies from other sectors. Consequently, the research tracks listed companies that have invested considerably in these private ones by analyzing the funding contribution of the listed companies to the corresponding venture capital or private equity funding rounds. Additionally, the research tracks listed companies that are providing a Sharing Activity by quantifying the involvement of these listed companies in this activity. For example, for a listed company active in the ride sharing, a quantitative value would be the number of rides shared through the platform of the listed company.

2.2 ORDINARY ADJUSTMENT

The composition of the Index is adjusted at the close of the second Wednesday in May and November. The composition of the Index is reviewed on the Selection Day and necessary changes are announced. The composition is implemented after the close of the market on the Adjustment Day.

In addition to the annual Adjustment Days, there is a semi-annual IPO Review Date, where IPOs are evaluated. In order for the newly offered security to be eligible for inclusion the Index on the IPO Adjustment Day, the security offered at the IPO must fulfill the criteria outlined in Section 4, as well as the Buffer Rules for IPOs outlined in Section 2.1.1. The changes will be implemented after the close of the



Exchange on the IPO Adjustment Day. The weight of the other Index Components will be adjusted according to the Buffer Rules for IPOs outlined in Section 2.1.1.

Solactive AG shall publish any changes made to the Index Constituents on the Selection Day and the IPO Review Date and consequently with sufficient notice before the Adjustment Day and IPO Adjustment Day respectively.

2.3 EXTRAORDINARY ADJUSTMENT

An extraordinary adjustment, if applicable, is triggered and applied in compliance with the rules set forth in the [Solactive Guideline for Extraordinary Corporate Actions](#).

3 CALCULATION OF THE INDEX

3.1 INDEX FORMULA

The value of the Index (the "Index Value") on a Business Day at the relevant time is calculated in accordance with the following formula:

$$Index_t = \sum_{i=1}^n \frac{(x_{i,t} \times p_{i,t} \times f_{i,t})}{D_t}$$

With:

- $x_{i,t}$ = is the Number of Index Shares of the Index Component i on Trading Day t
- $p_{i,t}$ = Trading Price of Index Component i on Trading Day t
- $f_{i,t}$ = foreign exchange rate (as described in Section 1.4) to convert the Trading Price of Index Component i on Trading Day t into the Index Currency
- D_t = Divisor on Trading Day t

The initial Divisor on the Start Date is calculated according to the following formula:

$$D_t = \frac{\sum_{i=1}^n (p_{i,t} \times f_{i,t} \times x_{i,t})}{1000}$$

After the close of the Exchange on each Adjustment Day t , the new Divisor is calculated to account for adjustments (Section 2.2 or Section 3.3) as follows:

$$D_{t+1} = \frac{\sum_{i=1}^n (p_{i,t} \times f_{i,t} \times x_{i,t+1})}{Index_t}$$

This Divisor is valid starting the immediately following Business Day.

3.2 ACCURACY

- > The Index Value will be rounded to two decimal places.



> Divisors will be rounded to six decimal places.

3.3 ADJUSTMENTS

The Index needs to be adjusted for systematic changes in prices, resulting for example from corporate actions (Section 3.5), once these become effective. This requires the new Number of Index Shares of the affected Index Component and the Divisor to be calculated on an ex-ante basis.

Following the occurrence of dividend payments and other distributions (Section 3.4), capital increases (Section 3.5.1) and share splits (Section 3.5.2) the Index is adjusted.

This procedure ensures that the first ex quote can be properly reflected in the calculation of the Index. This ex-ante procedure assumes the general acceptance of the Index calculation formula as well as open access to the parameter values used. The calculation parameters are provided by the Index Calculator.

3.4 DIVIDENDS AND OTHER DISTRIBUTIONS

Dividend payments and other distributions are included in the Index. They cause an adjustment of the Divisor. The new Divisor is calculated as follows:

$$D_{t+1} = D_t \times \frac{\sum_{i=1}^n (p_{i,t} \times f_{i,t} \times x_{i,t}) - (x_{i,t} \times y_{i,t} \times g_{i,t})}{\sum_{i=1}^n (p_{i,t} \times f_{i,t} \times x_{i,t})}$$

With:

- $x_{i,t}$ = Number of Index Shares of the Index Component i on Trading Day t
- $y_{i,t}$ = distribution of cash in the base currency of a company (currency used in the company's audited reports) corresponding to the Index Component i with ex-date $t + 1$ multiplied by the Dividend Correction Factor,
- $p_{i,t}$ = Trading Price of Index Component i on Trading Day t
- $f_{i,t}$ = foreign exchange rate to convert the Trading Price of Index Component i on Trading Day t into the Index Currency
- $g_{i,t}$ = foreign exchange rate to convert the amount of the distribution in respect of Index Component i on Trading Day t into the Index Currency
- D_t = Divisor on Trading Day t
- D_{t+1} = Divisor on Trading Day $t + 1$

3.5 CORPORATE ACTIONS

3.5.1 Principles

Following the announcement by an issuer of Index Components of the terms and conditions of a corporate action, the Index Calculator determines whether such corporate action has a dilutive, concentrative or similar effect on the price of the respective Index Component.



If this should be the case, the Index Calculator shall make the necessary adjustments that are deemed appropriate in order to take into account the dilutive, concentrative or similar effect and shall determine the date on which this adjustment shall come into effect.

Amongst other things, the Index Calculator can take into account the adjustment made by an Affiliated Exchange as a result of the corporate action with regard to option and futures contracts on the respective share traded on this Affiliated Exchange.

3.5.2 Capital Increases

In the case of capital increases with ex-date $t + 1$, the Index is adjusted as follows:

$$x_{i,t+1} = x_{i,t} \times \frac{1 + B}{1}$$

With:

- $x_{i,t}$ = Number of Index Shares of the Index Component i on Trading Day t
- $x_{i,t+1}$ = Number of Index Shares of the Index Component i on Trading Day $t + 1$
- B = shares received for every share held

$$p_{i,t+1} = \frac{p_{i,t} + s \times B}{1 + B}$$

With:

- $p_{i,t}$ = Trading Price of Index Component i on Trading Day t
- $p_{i,t+1}$ = hypothetical price of Index Component i on Trading Day $t + 1$
- s = subscription price in the Index Component currency
- B = shares received for every share held

$$D_{t+1} = D_t * \frac{\sum_{i=1}^n (p_{i,t} \times f_{i,t} \times x_{i,t}) + \sum_{i=1}^n [(x_{i,t+1} \times p_{i,t+1} \times f_{i,t}) - (x_{i,t} \times p_{i,t} \times f_{i,t})]}{\sum_{i=1}^n (p_{i,t} \times f_{i,t} \times x_{i,t})}$$

With:

- $x_{i,t}$ = Number of Index Shares of the Index Component i on Trading Day t
- $x_{i,t+1}$ = Number of Index Shares of the Index Component i on Trading Day $t + 1$
- $p_{i,t}$ = Trading Price of Index Component i on Trading Day t
- $p_{i,t+1}$ = hypothetical price of Index Component i on Trading Day $t + 1$
- $f_{i,t}$ = foreign exchange rate to convert the Trading Price of Index Component i on Trading Day t into the Index Currency
- D_t = Divisor on Trading Day t



D_{t+1} = Divisor on Trading Day $t + 1$

3.5.3 Share Splits

In the case of share splits with ex-date on Trading Day $t + 1$, it is assumed that the prices change in ratio of the terms of the split. The new Number of Index Shares is calculated as follows:

$$x_{i,t+1} = x_{i,t} \times B$$

With:

- $x_{i,t}$ = Number of Index Shares of the affected Index Component on Trading Day t
- $x_{i,t+1}$ = Number of Index Shares of the affected Index Component on Trading Day $t + 1$
- B = shares after the share split for every share held before the split

3.5.4 Stock Distributions

In the case of stock distributions with ex-date on Trading Day $t + 1$, it is assumed that the prices change according to the terms of the distribution. The new Number of Index Shares is calculated as follows:

$$x_{i,t+1} = x_{i,t} \times (1 + B)$$

With:

- $x_{i,t}$ = Number of Index Shares of the Index Component i on Trading Day t
- $x_{i,t+1}$ = Number of Index Shares of the Index Component i on Trading Day $t + 1$
- B = shares received for every share held

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](#).

3.7 GROSS TOTAL RETURN

$$\text{Gross Total Return} = (Index_{t+1} - Index_t) \div Index_t$$



4 DEFINITIONS

The "**Index Universe**" in respect of a Selection Day are companies that fulfill the following criteria:

1. Equity securities listed on the Exchange in a Developed Country as defined by Solactive AG including ADRs (American Depositary Receipts) and GDRs (Global Depositary Receipts).
2. The "Solactive Sharing Economy Industry Classification" defined and published by the research department at Solactive AG. The classification is available under the following link:

<https://www.solactive.com/documents/solactive-sharing-economy-index/>

The "Solactive Sharing Economy Research" is a research report compiled and generated by Solactive with regard to companies active in the sharing economy as specified in Section 2.1 "Selection Criteria 2" and "Selection Criteria 3".

The research data is based on the latest public information. Any information is considered valid for two years after its initial publication unless such information is superseded by more recent information.

The "Developed Country" are defined by Solactive in the Solactive Country Classification document. It can be found under the following link: <https://www.solactive.com/documents/>

The "**Index Component**" is each share currently included in the Index.

The "**Total Shares**" are in respect of an Index Component and any given Business Day the number or fraction of shares included in the Index. It is calculated for any Index Component as the ratio of (A) the Percentage Weight of an Index Component multiplied by the Index value and the Divisor and (B) its Trading Price (converted into the Index Currency according to the principles laid out in Section 1.4 of this document).

The "**Percentage Weight**" of an Index Component is the ratio of its Trading Price multiplied by its Number of Shares divided by the Index value and the Divisor.

The "**Dividend Correction Factor**" is calculated as 1 minus the applicable withholding tax rate and/or other applicable tax rate currently prevalent in the respective country.

In particular, an "**Extraordinary Event**" is

- > a Merger
- > a Takeover Bid
- > a Delisting
- > the Nationalization of a company
- > Insolvency.

The Trading Price for this Index Component on the day the event came into effect is the last available market price for this Index Component quoted on the Exchange on the day the event came into effect (or, if a market price is not available for the day the event came into effect, the last available market price quoted on the Exchange on a day specified as appropriate by the Index Calculator) as determined by the



Index Calculator, and this price is used as the Trading Price of the particular Index Component until the end of the day on which the composition of the Index is next set.

In the event of the Insolvency of an issuer of an Index Component, the Index Component shall remain in the Index until the next Adjustment Day. As long as a market price for the affected Index Component is available on a Business Day, this shall be applied as the Trading Price for this Index Component on the relevant Business Day, as determined in each case by the Index Calculator. If a market price is not available on a Business Day the Trading Price for this Index Component is set to zero. The Committee may also decide to eliminate the respective Index Component at an earlier point in time prior to the next Adjustment Day. The procedure in this case is identical to an elimination due to an Extraordinary Event.

An Index Component is "**delisted**" if the Exchange announces pursuant to the Exchange regulations that the listing of, the trading in, or the issuing of public quotes on the Index Component at the Exchange has ceased immediately or will cease at a later date, for whatever reason (provided the Delisting is not because of a Merger or a Takeover Bid), and the Index Component is not immediately listed, traded or quoted again on an exchange, trading or listing system, acceptable to the Index Calculator.

"**Insolvency**" occurs with regard to an Index Component if (A) all shares of the respective issuer must be transferred to a trustee, liquidator, insolvency administrator or a similar public officer as result of voluntary or compulsory liquidation, insolvency or winding-up proceedings or comparable proceedings affecting the issuer of the Index Components or (B) the holders of the shares of this issuer are legally enjoined from transferring the shares.

A "**Takeover Bid**" is a bid to acquire, an exchange offer, or any other offer or act of a legal person that results in the related legal person acquiring as part of an exchange or otherwise more than 10% and less than 100% of the voting shares in circulation from the issuer of the Index Component or the right to acquire these shares, as determined by the Index Calculator based on notices submitted to public or self-regulatory authorities or other information considered by the Index Calculator to be relevant.

With regard to an Index Component, a "**Merger**" is

- (i) a change in the security class or a conversion of this share class that results in a transfer or an ultimate definite obligation to transfer all the shares in circulation to another legal person,
- (ii) a merger (either by acquisition or through forming a new structure) or a binding obligation on the part of the issuer to exchange shares with another legal person (except in a merger or share exchange under which the issuer of this Index Component is the acquiring or remaining company and which does not involve a change in security class or a conversion of all the shares in circulation),
- (iii) a takeover offer, exchange offer, other offer or another act of a legal person for the purposes of acquiring or otherwise obtaining from the issuer 100% of the shares issued that entails a transfer or the irrevocable obligation to transfer all shares (with the exception of shares that are held and controlled by the legal person), or
- (iv) a merger (either by acquisition or through forming a new structure) or a binding obligation on the part of the issuer of the share or its subsidiaries to exchange shares with another legal person,



whereby the issuer of the share is the acquiring or remaining company and it does not involve a change in the class or a conversion of the all shares issued, but the shares in circulation directly prior to such an event (except for shares held and controlled by the legal person) represent in total less than 50% of the shares in circulation directly subsequent to such an event.

"Affiliated Exchange" means with respect to an Index Component, each exchange, trading system or quotation system whose trading has an effect on the overall market for options contracts or futures contracts on the Index Component, and any successor acceptable to the Index Calculator.

The "Start Date" is November 13, 2018. As of this date, the Index level is calculated automatically by the platform based on real data feed.

The "**Merger Date**" is the date on which a Merger is concluded or the date specified by the Index Calculator if such a date cannot be determined under the law applicable to the Merger.

"**Nationalization**" is a process whereby all shares or the majority of the assets of the issuer of the shares are nationalized or are expropriated or otherwise must be transferred to public bodies, authorities or institutions.

The "**Exchange**" is, in respect of the Index and every Index Component, the respective primary exchange where the Index Component has its primary listing. The Committee may decide to declare a different stock exchange the "Exchange" for trading reasons, even if the company is only listed there via a Stock Substitute.

A "**Stock Substitute**" includes in particular, American Depositary Receipts (ADR) and Global Depositary Receipts (GDR).

With regard to an Index Component (subject to the provisions given above under "Extraordinary Events") the "**Trading Price**" in respect of a Trading Day is the closing price on this Trading Day determined in accordance with the Exchange regulations. If the Exchange has no closing price for an Index Component, the Index Calculator shall determine the Trading Price and the time of the quote for the share in question in a manner that appears reasonable to it.

A "**Trading Day**" is in relation to the Index or an Index Component a Trading Day on the Exchange (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 normal Exchange closing time. The Index Calculator is ultimately responsible as to whether a certain day is a Trading Day with regard to the Index or an Index Component or in any other connection relating to this document.

The "**Index Calculator**" is Solactive AG or any other appropriately appointed successor in this function.

The "**Index Currency**" is USD.

The "**Free Float Market Capitalization**" is with regard to each of the securities in the Index on a Selection Day the share class-specific Free Float Market Capitalization for any security in the Index Universe. It is calculated as the multiplication of the shares outstanding in Free Float (as sourced from data vendors) with the Trading Price of the share class as of the respective Selection Day.



A "**Business Day**" is a working day for the Exchange, and typically it is a weekday from Monday through Friday. A Business Day is not a holiday for the Exchange, and not a weekend day according the official calendar of the country of the Exchange.

The "**Adjustment Day**" is the close of the second Wednesday in May and November. If that day is not an Eligible Rebalancing Day, the Adjustment Day will be the following Eligible Rebalancing Day.

The "**Selection Day**" is a Business Day falling 20 Business Days before the Adjustment Day.

The "**Eligible Rebalancing Day**" is each day that is a Trading Day at the New York Stock Exchange, the London Stock Exchange, the EUREX Exchange and the Tokyo Stock Exchange.

The "6-month Average Daily Value Traded " means, in respect of an Index Component and of a Trading Day, the product of (i) the Trading Price of such Index Component and (ii) the volume traded (measured as a number of shares) of such Index Component across all Exchanges during such Trading Day. The volume is the average volume over the last 6-month till the Trading Day.

"IPO Adjustment Day" is the second Wednesday of February and August. If that day is not an Eligible Rebalancing Day, the Adjustment Day will be the following Eligible Rebalancing Day.

"IPO Review Day" is 20 Business Days before the IPO Adjustment Day.

A "**Market Disruption Event**" occurs if

1. one of the following events occurs or exists on a Trading Day prior to the opening quotation time for an Index Component:
 - A) trading is suspended or restricted (due to price movements that exceed the limits allowed by the Exchange or an Affiliated Exchange, or for other reasons):
 - 1.1. across the whole Exchange; or
 - 1.2. in options or futures contracts on or with regard to an Index Component or an Index Component that is quoted on an Affiliated Exchange; or
 - 1.3. on an Exchange or in a trading or quotation system (as determined by the Index Calculator) in which an Index Component is listed or quoted; or
 - B) an event that (in the assessment of the Index Calculator) generally disrupts and affects the opportunities of market participants to execute on the Exchange transactions in respect of a share included in the Index or to determine market values for a share included in the Index or to execute on an Affiliated Exchange transaction with regard to options and futures contracts on these shares or to determine market values for such options or futures contracts.
2. trading on the Exchange or an Affiliated Exchange is ceased prior to the "**Normal Exchange Closing Time**", which is the time at which the Exchange or an Affiliated Exchange is normally closed on working days without taking into account after-hours trading or other trading activities carried out outside the normal trading hours. An exception to this classification as a Market Disruption Event is where the early cessation of trading is announced by the Exchange or Affiliated Exchange on this Trading Day at least one hour before



- 2.1. the actual closing time for normal trading on the Exchange or Affiliated Exchange on the Trading Day in question or, if earlier.
 - 2.2. the closing time (if given) of the Exchange or Affiliated Exchange for the execution of orders at the time the quote is given.
3. a general moratorium is imposed on banking transactions in the country in which the Exchange is resident if the above-mentioned events are material in the assessment of the Index Calculator, whereby the Index Calculator makes its decision based on those circumstances that it considers reasonable and appropriate.

5 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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