

INDEX GUIDELINE

Solactive Global Silver Miners Total Return Index

Version 1.8

19 May 2020



TABLE OF CONTENTS

INTRODUCTION.....	4
1 INDEX SPECIFICATIONS	5
1.1 SHORT NAME AND ISIN.....	5
1.2 INITIAL VALUE.....	5
1.3 DISTRIBUTION.....	5
1.4 PRICES AND CALCULATION FREQUENCY	5
1.5 WEIGHTING	6
1.5.1 CONTINUOUS LISTING STANDARD REVIEW	7
1.6 OVERSIGHT	7
1.7 PUBLICATION	8
1.8 HISTORICAL DATA.....	8
1.9 LICENSING.....	8
2 COMPOSITION OF THE INDEX.....	9
2.1 SELECTION OF THE INDEX COMPONENTS.....	9
2.2 ORDINARY ADJUSTMENT	9
2.3 EXTRAORDINARY ADJUSTMENT	10
3 CALCULATION OF THE INDEX	11
3.1 INDEX FORMULA	11
3.2 ACCURACY	11
3.3 ADJUSTMENTS.....	11
3.4 DIVIDENDS AND OTHER DISTRIBUTIONS.....	12
3.5 CORPORATE ACTIONS	12
3.5.1 PRINCIPLES.....	12
3.5.2 CAPITAL INCREASES	13
3.5.3 CAPITAL REDUCTIONS.....	13
3.5.4 SHARE SPLITS AND PAR VALUE CONVERSIONS.....	13
3.6 RECALCULATION.....	14
3.7 MARKET DISRUPTION	14
4 DEFINITIONS.....	15
5 MISCELLANEOUS.....	21
5.1 DISCRETION.....	21
5.2 METHODOLOGY REVIEW	21



5.3 CHANGES IN CALCULATION METHOD	21
5.4 TERMINATION	21
CONTACT	23



INTRODUCTION

This document (the "Guideline") is to be used as a guideline with regard to the composition, calculation and management of the Solactive Global Silver Miners Total Return Index (the "Index"). Any changes made to the Guideline are initiated by the Committee specified in Section 1.6. The Index is owned, 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 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

- > The Solactive Global Silver Miners Total Return Index (the "Index") is an Index of Solactive and is calculated, administrated and distributed by Solactive.
- > The Index tracks the price movements in shares of companies which are active in the silver mining industry.
- > The Index is a total return index.
- > The Index is published in USD.

1.1 SHORT NAME AND ISIN

The INDEX is published under the following identifiers:

Name	ISIN	Currency	Type	RIC	BBG ticker
Solactive Global Silver Miners Total Return Index	DE000A1DKEB9	USD	TR	.SOLGLOSI	SOLGLOSI

1.2 INITIAL VALUE

The Index is based on 100 as at the close of trading on the start date of 26.02.2010.

1.3 DISTRIBUTION

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 affiliated vendors. Each vendor decides on an individual basis as to whether it will distribute/display the Index via its information systems.

1.4 PRICES AND CALCULATION FREQUENCY

The value of the Index is calculated every 15 seconds on each Business Day from 9:00 a.m. to 10:30 p.m. CET 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 the current Intercontinental Exchange (the "ICE") spot foreign exchange rate. Should there be no current price available for an Index Component, the most recent price or the Trading Price for the preceding Trading Day is used in the calculation.



In addition to the intraday calculation a closing value of the Index for each Business Day is also calculated. This closing value is based on the Trading Prices for the Index Components on the respective Exchanges on which the Index Components are listed. The Trading 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 for the relevant Business Day, the last available 04:00 p.m. London time WM Fixing will be used for the closing value calculation.

1.5 WEIGHTING

On each Selection Day each Index Component of the Solactive Global Silver Miners is ranked according its Free Float Market Capitalization and weighted in four steps:

1. Each Index Component is weighted proportionally according to its Free Float Market Capitalization
2. The Percentage Weight of a single Index Component is capped at 22.5%. The excess weight is allocated proportionally to all Index Components whose Percentage Weight is not capped.
3. The weights of the top ranked Index Components with a weight above 5% will be aggregated. This aggregated weight has a max cap of 48%. The last Index Component that would add up to 48% or would exceed 48%, will receive an index weight of the maximum of
 - a. 48% minus the sum of weights of the higher ranked Index Components or
 - b. 4.75%
4. The Percentage Weight of all other Index Components is capped at 4.75%. The excess weight is allocated proportionally to all Index Components whose Percentage Weight is less than 4.75%.

The new index composition and weightings are implemented after the close of trading on the Adjustment Day. The capping methodology may be amended by the Committee from time to time to ensure appropriate index representation and index compliance with financial product regulations in the United States.

The cumulative Percentage Weight of the Index Components which do not fulfil the Liquidity Criterion is capped at 10% on the Selection Days. The excess weight is allocated proportionally to all Index Components whose Percentage Weight is not capped.

The calculated Number of Shares as of the Selection Day are used and will be implemented as of the close on the Adjustment Day. To match the correct index level on the Adjustment Day, the Number of Shares will be multiplied with a constant Correction Factor, i.e. the Number of Shares will be up scaled or down scaled.

The Number of Shares as of the Selection Date are adjusted for any relevant corporate actions between Selection Day and Adjustment Day. This only relates to corporate actions that have a direct impact on the price and shares (i.e. stock splits, stock dividends, rights issues).



For clarification: The calculation of the weighting is based on the close market data as of the Selection Day.

After the new weights are determined, 1.5.1 will be applied.

1.5.1 CONTINUOUS LISTING STANDARD REVIEW

On each Monitoring Selection Day the index composition will be reviewed for a breach of the following criteria (Continuous Listing Standards):

- The maximum weight of the top index constituent must not be larger than 25%
- If this criterion is breached, the stock is capped at 22% and the excess weight is redistributed to other non-capped stocks.
- The maximum aggregate weight of top 5 index constituents must not exceed 60%
- If this criterion is breached, the stocks will be proportionally capped at 55% and the excess weight is redistributed to other non-capped stocks.
- The maximum weight of constituents with a market liquidity below 250,000 shares traded (monthly average of the previous 6 months) and USD 25m monthly average daily traded value (monthly average of the previous 6 months) must not exceed 30%
- If this criterion is breached, the stocks with a market liquidity below 250,000 shares traded (monthly average of the previous 6 months) and USD 25m monthly average daily traded value (monthly average of the previous 6 months) will be proportionally capped at 25% and the excess weight is redistributed to other non-capped stocks.
- The maximum weight of constituents with a full-market capitalization below USD 100m must not account for more than 10%
- If this criterion is breached, stocks with market capitalization below 100m will be proportionally capped at 9% and the excess weight is redistributed to other non-capped stocks.
- This reweighting process will be repeated until no Continuous Listing Standards are breached.
- In the event that the CLS criteria cannot be satisfied using the buffers described above, the weighting will be reviewed by the Index Committee. After the review a decision will be announced publically.

1.6 OVERSIGHT

A Committee composed of staff from Solactive (the "Committee" or the "Index Committee") is responsible for 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 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/>.

1.7 PUBLICATION

All specifications and information (e.g. notices, amendments to the Guideline) 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 in accordance with Article 8 of the BMR from the launch of the Index on 24.03.2010.

1.9 LICENSING

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



2 COMPOSITION OF THE INDEX

2.1 SELECTION OF THE INDEX COMPONENTS

The initial composition of the Index as well as any ongoing adjustment is based on the following rules:

On the Selection Days, Solactive AG provides the Selection Pool. The Committee may decide to include companies in the Selection Pool which do not fulfil the Liquidity Criterion.

The companies in the Selection Pool are ranked according to their average daily trading volume on the respective Exchange in the last three months expressed in USD (the "Relevant Trading Volume"). The company with the largest Relevant Trading Volume is assigned rank number 1, the company with the second-largest Relevant Trading Volume rank number 2 etc. The companies with the highest ranks are then chosen as Index Components and the new index composition determined this way is valid starting the immediately following Adjustment Day. For clarification, rank number 1 is higher than rank number 2.

The minimum number of Index Components is 20 and the maximum number of Index Components is 40. The Committee may decide to increase the maximum number of Index Components on a Selection Day. In case the rank assigned to a company which is currently an Index Component on a Selection Day is not sufficient to be selected as an Index Component, it shall only be removed from the Index if its rank exceeds the maximum number of Index Components by more than five ranks. The company with the lowest rank which is selected as an Index Component on this Selection Day but which is not currently an Index Component on the Selection Day is not included in the Index in this case.

2.2 ORDINARY ADJUSTMENT

The composition of the Index is ordinarily adjusted twice a year on the last Business Day in April and October. The composition of the Solactive Global Silver Miners is reviewed on the Selection Day and the appropriate decision made is announced.

The first adjustment will be made in October 2010 based on the Trading Prices of the Index Components on the Adjustment Day.

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



2.3 EXTRAORDINARY ADJUSTMENT

If a company included in the Solactive Global Silver Miners Index is removed from the Index between two Adjustment Days due to an Extraordinary Event, if necessary, the Committee shall designate a successor. The Solactive Global Silver Miners Index is adjusted on the same day. This is announced on the Solactive website under the Section "Announcements", which is available at <https://www.solactive.com/news/announcements/>, after the close of business on the day on which the new composition of the Index was determined by the Committee.



3 CALCULATION OF THE INDEX

3.1 INDEX FORMULA

The Solactive Global Silver Miners is an index whose value on a Business Day is equivalent to the sum overall Index Components of the products of (a) the Number of Shares of the Index Component and (b) the price of the Index Component at the respective Exchange.

As a formula:

$$Index_t = \sum_{i=1}^n x_{i,t} * p_{i,t}$$

with:

$x_{i,t}$ = Number of Shares of the Index Component i on Trading Day t

$p_{i,t}$ = Price of Index Component i on Trading Day t

3.2 ACCURACY

- > The value of the Index will be rounded to two decimal places.
- > The Number of Shares of the Index Components will be rounded to six decimal places.
- > Trading Prices will be rounded to four decimal places.

3.3 ADJUSTMENTS

Indices need to be adjusted for systematic changes in prices once these become effective. This requires the new Number of Shares of the affected Index Component to be calculated on an ex-ante basis.

Following the Committee's decision, the Solactive Global Silver Miners is adjusted for distributions, capital increases, rights issues, splits, par value conversions and capital reductions.

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 Administrator.

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.

3.4 DIVIDENDS AND OTHER DISTRIBUTIONS

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

$$x_{it} = x_{i,t-1} * \frac{P_{i,t-1}}{P_{i,t-1} - D_{i,t}}$$

with

$x_{i,t}$ = Number of Shares of the Index Component i on Trading Day t

$D_{i,t}$ = Payment on Trading Day t multiplied by the Dividend Correction Factor of the respective country

3.5 CORPORATE ACTIONS

3.5.1 PRINCIPLES

Following the announcement by a company included in the Index of the terms and conditions of a corporate action the Index Administrator determines whether such corporate action has a dilution, concentration or other effect on the price of the Index Component.

If this should be the case the Index Administrator shall make the necessary adjustments to the affected Index Component and/or the formula for calculating the Index and/or to other terms and conditions of this document that he deems appropriate in order to take into account the dilution, concentration or other effect and shall determine the date on which this adjustment shall come into effect.

Amongst other things the Index Administrator 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 (from the company's own resources or through cash contributions) the new Numbers of Shares are calculated as follows:

$$x_{i,t} = x_{i,t-1} * \frac{P_{i,t-1}}{P_{i,t-1} - rB_{i,t-1}} \quad \text{with:} \quad rB_{i,t-1} = \frac{P_{i,t-1} - B - N}{BV + 1}$$

$x_{i,t}$ = Number of Shares of Index Component i on the day of the distribution

$x_{i,t-1}$ = Number of Shares of Index Component i on the day prior to the distribution

$p_{i,t-1}$ = Closing price on the day prior to ex date

$rB_{i,t-1}$ = Calculated value of rights issue

B = Price of rights issue

N = Dividend disadvantage

BV = Subscription ratio

B=0 if capital is increased from the company's own resources.

The last dividend paid or the announced dividend proposal is applied as the dividend disadvantage.

3.5.3 CAPITAL REDUCTIONS

In the case of capital reductions, the new Number of Shares is determined as follows:

$$x_{i,t} = x_{i,t-1} * \frac{1}{H_{i,t}}$$

$H_{i,t}$ = Reduction ratio of the company on day t

$x_{i,t}$ = Number of Shares of the affected Index Component on the day of the distribution

$x_{i,t-1}$ = Number of Shares of the affected Index Component on the day prior to the distribution

3.5.4 SHARE SPLITS AND PAR VALUE CONVERSIONS

In the case of share splits and par value conversions it is assumed that the prices change in ratio to the number of shares or to the par values. The new Number of Shares is calculated as follows:



$$x_{i,t} = x_{i,t-1} * \frac{N_{i,t-1}}{N_{i,t}}$$

$N_{i,t-1}$ = Former par value of security class i (or new number of shares)

$N_{i,t}$ = New par value of security class i (or former number of shares)

$x_{i,t}$ = Number of Shares of the affected Index Component on the day of the distribution

$x_{i,t-1}$ = Number of Shares of the affected Index Component on the day prior to the distribution

3.6 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/>.

3.7 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.



4 DEFINITIONS

“Selection Pool” in respect of a Selection Day are those companies that fulfill the following conditions:

- a) Listing on a regulated stock exchange in the form of shares tradable for foreign investors without restrictions
- b) Significant business operations in the silver mining industry. This implies that
 - a. a significant part of the company's revenues is generated in silver mining and/or closely related activities (e.g. exploration or refining of silver) and/or
 - b. a company is expected to generate a significant part of its revenues in silver mining and/or closely related activities (e.g. exploration or refining of silver) in the future.
- c) Free Float Market Capitalization of at least 60 million USD for companies which are not Index Components on the respective Selection Day, at least 30 million USD for companies which are Index Components on the respective Selection Day.
- d) Average daily trading volume in the last three months of at least 250,000 USD for companies which are not Index Components on the respective Selection Day, at least 125,000 USD for companies which are Index Components on the respective Selection Day
- e) Average monthly trading volume of at least 75,000 shares in each of the last six months (“Liquidity Criterion”).

“Index Component” is each share currently included in the Index.

“Number of Shares” is 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 (B) its Trading Price.

“Percentage Weight” of an Index Component is the ratio of its Trading Price multiplied by its Number of Shares divided by the Index value.

“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 Takeoverbid



- a delisting
- the Nationalisation 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 Administrator), as determined by the Index Administrator, 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 Administrator. 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 and 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 delisting is not because of a Merger or a Takeoverbid), and the Index Component is not immediately listed, traded or quoted again on an exchange, trading or listing system, acceptable to the Index Administrator,

"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 a 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 "Takeoverbid" 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 Administrator based on notices submitted to public or self-regulatory authorities or other information considered by the Index Administrator to be relevant.

With regard to an Index Component a "Merger" is



- a) 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,
- b) 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),
- c) 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 which are held and controlled by the legal person), or
- d) 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.

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

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

"Exchange" is, in respect of the Selection Pool 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.

"Stock Substitute" includes in particular American Depository Receipts (ADR) and Global Depository 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 Administrator shall determine the Trading Price and the time of the quote for the share in question in a manner that appears reasonable to him.

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 Administrator 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.

A "Business Day" is every weekday except for Saturday and Sunday.

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

The "Index Currency" is US-Dollar.

"Market Capitalization" is with regard to each of the shares in the Selection Pool on a Selection Day or Adjustment Day the value published by Reuters (or a successor) as the Market Capitalization for this day.

As at the date of this document Market Capitalization is defined by Reuters as the value of a company calculated by multiplying the number of shares outstanding of the company by its share price. "Free Float Market Capitalization" is with regard to each of the shares in the Selection Pool or in the Index on a Selection Day or Adjustment Day the Market Capitalization for this day multiplied by the ratio of (A) the number of shares in circulation and (B) the number of shares outstanding of the respective company.

If Reuters (or a successor):

(i) does not publish for a Selection Day a Market Capitalization for a share or

(ii) adopts another method for calculating the Market Capitalization for all shares or only with regard to the share in question or uses different assumptions in calculating the Market Capitalization for all shares or only with regard to the share in question, and in the reasonable assessment of the Index Administrator involves material changes (the Index Administrator makes the decision as to whether such changes are to be deemed "material" by applying factors that in his reasonable assessment appear appropriate to him),

the Index Administrator will determine the Market Capitalization in respect of the shares or of a share included in the Selection Pool and the respective Selection Day either from another publicly accessible source specified at his sole discretion or from other sources that in his assessment are reasonable and appropriate in the event that no other publicly quoted suitable prices are available.

"Adjustment Day" is the last Trading Day in April and October.



“Selection Day” is the Business Day 10 Business Days before the Adjustment Day.

“Monitoring Selection Day” is the business day 10 business days before the Monitoring Adjustment Day

“Monitoring Adjustment Day” is the last Trading Day in January, April, July and October

An “Affiliated Exchange” is with regard to an Index Component an exchange, a trading or quotation system on which options and futures contracts on the Index Component in question are traded, as specified by the Index Administrator.

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 Administrator) in which an Index Component is listed or quoted; or
- B) an event that (in the assessment of the Index Administrator) 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; or
2. trading on the Exchange or an Affiliated Exchange is ceased prior to the usual closing time (as defined below), unless the early cessation of trading is announced by the Exchange or Affiliated Exchange on this Trading Day at least one hour before
 - (aa) the actual closing time for normal trading on the Exchange or Affiliated Exchange on the Trading Day in question or, if earlier.
 - (bb) the closing time (if given) of the Exchange or Affiliated Exchange for the execution of orders at the time the quote is given.



"Normal exchange closing time" 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; or

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 Administrator, whereby the Index Administrator makes his decision based on those circumstances that he considers reasonable and appropriate.



5 MISCELLANEOUS

5.1 DISCRETION

Any discretion which may need to be exercised in relation to the determination of the INDEX (for example the determination of the SELECTION POOL (if applicable), the selection of the INDEX COMPONENTS (if applicable) or any other relevant decisions in relation to the INDEX) shall be made in accordance with strict rules regarding the exercise of discretion or expert judgement.

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", 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/>.

CONTACT

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

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

Fax: +49 (0) 69 719 160 25

Email: info@solactive.com

Website: www.solactive.com

© Solactive AG