

INDEX GUIDELINE

HSBC MERGER ARBITRAGE 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 HSBC Merger Arbitrage Index Family (the "**INDEX FAMILY**"). Any amendments to the rules made to the GUIDELINE are approved by the OVERSIGHT COMMITTEE specified in Section 5.5. Each INDEX within the INDEX FAMILY 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	Trying to capture the merger arbitrage premium arising from deal failure risk.
Regional Allocation	United States
Rebalancing Frequency	Weekly

1.2. IDENTIFIERS AND PUBLICATION

The indices belong to the INDEX FAMILY, and are published under the following identifiers:

Name	Version	ISIN	Currency	Type	RIC	BBG ticker
HSBC Merger Arbitrage Long Only Subindex 1	Long Subindex 1	DE000SLOA8W0	USD	GTR	.HSIEMAL1	HSIEMAL1
HSBC Merger Arbitrage Long Only Subindex 2	Long Subindex 2	DE000SLOA8X8	USD	GTR	.HSIEMAL2	HSIEMAL2
HSBC Merger Arbitrage Long Only Subindex 3	Long Subindex 3	DE000SLOA8Y6	USD	GTR	.HSIEMAL3	HSIEMAL3
HSBC Merger Arbitrage Long Only Index	Long Index	DE000SLOAU08	USD	GTR	.HSIEMALT	HSIEMALT
HSBC Merger Arbitrage Hedge Index	Hedge Index	DE000SLOAU16	USD	GTR	.HSIEMAHE	HSIEMAHE
HSBC Merger Arbitrage Excess Return Index	Long Short Index ER	DE000SLOAU32	USD	ER	.HSIEMAER	HSIEMAER
HSBC Merger Arbitrage Total Return Index	Long Short Index TR	DE000SLOAU24	USD	TR	.HSIEMATR	HSIEMATR



*GTR, ER, TR means that the Index is calculated as a gross total return, excess return, or total return Index as described in the Equity Index Methodology, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>

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

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

1.3. INITIAL LEVEL OF THE INDEX

The initial level of each INDEX on the 11/01/2006, the START DATE, is 1000. Historical values from the 30/06/2020, the LIVE DATE, will be recorded in accordance with Article 8 of the BMR. Levels of each INDEX published for a period prior to the LIVE DATE have been back-tested..

1.4. PRICES AND CALCULATION FREQUENCY

The level of each INDEX is calculated on each CALCULATION DAY from 3:30 p.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 Reuters 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 each 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 4pm London time WM Fixing quoted by Reuters. If there is no 4pm London time WM Fixing for the relevant CALCULATION DAY, the last available 4pm London time WM Fixing will be used for the closing level calculation.

1.5. LICENSING

Licenses to use each INDEX as the underlying value for financial instruments, investment funds and financial contracts may be issued to stock exchanges, banks, financial services providers and investment houses by the CLIENT.



2. INDEX SELECTION

On each SELECTION DAY, the INDEX ADMINISTRATOR will revise the composition of the LONG SUBINDICES and the Hedge INDEX.

In a first step, the INDEX ADMINISTRATOR 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 INDEX COMPONENT will be assigned a weight as described in Section 2.3.

2.1. INDEX UNIVERSE REQUIREMENTS

LONG SUBINDICES

The INDEX UNIVERSE for the LONG SUBINDICES is comprised of all targets from the M&A deals that fulfill the below requirements according to FactSet (the "INDEX UNIVERSE REQUIREMENTS"):

- All Mergers or Acquisitions announced during the 300 CALCULATION DAYS prior to and including the SELECTION DAY
- Target domiciled in the United States. If the deal contains Stock terms the acquirer has to be incorporated in the United States as well
- Payment type: Cash, Stock, Cash and Stock, Cash or Stock
- Deal status: pending as of the SELECTION DAY
- Deal size: USD 500 million or more on the announcement date
- Nature of bid: Friendly
- Both target and acquirer are publicly listed
- Target is not announced to be delisted prior to the REBALANCE DAY immediately following the next REBALANCE DAY of Long Subindex 3 by Solactive

HEDGE INDEX

The INDEX UNIVERSE for the HEDGE INDEX is comprised of all sector ETFs below:

ISIN	Name
US81369Y6059	Financial Select Sector SPDR Fund
US81369Y8030	Technology Select Sector SPDR Fund



US81369Y8527	Communication Services Select Sector SPDR Fund
US81369Y2090	Health Care Select Sector SPDR Fund
US81369Y3080	Consumer Staples Select Sector SPDR Fund
US81369Y4070	Consumer Discretionary Select Sector SPDR Fund
US81369Y8865	Utilities Select Sector SPDR Fund
US81369Y1001	Materials Select Sector SPDR Fund
US81369Y5069	Energy Select Sector SPDR Fund
US81369Y7040	Industrial Select Sector SPDR Fund

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

2.2. SELECTION OF THE INDEX COMPONENTS

LONG SUBINDICES

Based on the INDEX UNIVERSE, the initial composition of the LONG SUBINDICES 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"):

- All securities from the INDEX UNIVERSE are initially eligible for inclusion in the LONG SUBINDICES
- If a security is included in multiple M&A deals that were eligible at the same time according to Section 2.1, the deal that has been part of the LONG SUBINDICES as of the previous SELECTION DAY will be selected, and the other(s) removed. If neither of the deals were part of the LONG SUBINDICES as of the previous SELECTION DAY the one with the higher deal value is selected
- Securities that are not part of the LONG SUBINDICES, as of the previous SELECTION DAY, and do not have composite price and volume data available for more than 5 CALCULATION DAYS during the 20 CALCULATION DAYS period prior to and including the SELECTION DAY are removed

HEDGE INDEX

All sector ETFs from the INDEX UNIVERSE are eligible for inclusion in the HEDGE INDEX.

The selection of the INDEX COMPONENTS is fully rules-based and the INDEX ADMINISTRATOR cannot make any discretionary decisions.



2.3. WEIGHTING OF THE INDEX COMPONENTS

LONG SUBINDICES

On each SELECTION DAY each INDEX COMPONENT in the LONG SUBINDICES is assigned a weight according to the rules below.

- First, the preliminary weight of each INDEX COMPONENT is calculated as follows:
 - i) For every security i that is part of the LONG SUBINDICES as of the previous REBALANCE DAY and is part of the INDEX COMPONENTS from Section 2.2:

$$\tilde{W}_s^i = W_{s-1}^i$$

Where:

- \tilde{W}_s^i The preliminary weight of security i on SELECTION DAY s
- W_{s-1}^i The final weight of security i calculated on SELECTION DAY $s - 1$
- s The SELECTION DAY
- $s - 1$ The SELECTION DAY immediately preceding s

- ii) For every security i that is not part of the LONG SUBINDICES as of the previous REBALANCE DAY, but is part of the INDEX COMPONENTS from Section 2.2:

$$\tilde{W}_s^i = \min\left(\frac{200\%}{N}, cap_s^i\right)$$

$$cap_s^i = \min(5\%, \alpha \times ADTVC_s^i, \beta \times ADVTP_s^i)$$

Where:

- \tilde{W}_s^i The preliminary weight of security i on SELECTION DAY s
- cap_s^i The liquidity filter cap of security i on SELECTION DAY s
- α & β $\alpha = \frac{1}{500,000,000} \times 15\% \times 3$, $\beta = \frac{1}{500,000,000} \times 50\% \times 3$
- $ADTVC_s^i$ AVERAGE DAILY VALUE TRADED over 20 CALCULATION DAYS period up to, and including SELECTION DAY s , across all exchanges on which security i is listed
- $ADVTP_s^i$ AVERAGE DAILY VALUE TRADED over 20 CALCULATION DAYS period up to, and including SELECTION DAY s , on the primary exchange on which security i is listed
- N Number of eligible constituents of the LONG SUBINDICES as defined in section 2.2



If there is no price or volume data available on the primary exchange for security i for more than 5 CALCULATION DAYS during such 20 CALCULATION DAYS period prior to SELECTION DAY s , $ADVTP_s^i$ will be estimated as $30\% \times ADVTC_s^i$

- iii) For every security i that is part of the LONG SUBINDICES as of the previous REBALANCE DAY, but not part of the INDEX COMPONENTS from Section 2.2:

$$\tilde{W}_s^i = 0$$

- The final weight for each INDEX COMPONENT i of the LONG SUBINDICES on SELECTION DAY s is then calculated as follows:

$$W_s^i = \frac{2 \times \tilde{W}_s^i}{\max(200\%, \sum \tilde{W}_s^i)}$$

The weight of the CASH INSTRUMENT in the LONG SUBINDICES is determined as:

$$W_s^{L,c} = 1 - \sum W_s^i$$

Where:

- W_s^i The final weight of security i on SELECTION DAY s
- \tilde{W}_s^i The preliminary weight of security i on SELECTION DAY s
- $W_s^{L,c}$ The final weight of the CASH INSTRUMENT on SELECTION DAY s for the LONG SUBINDICES

HEDGE INDEX

On the SELECTION DAY each sector ETF in the HEDGE INDEX is assigned a weight according to the rules below:

- Each security of the LONG SUBINDICES is mapped to a HEDGING POOL and corresponding sector ETF based on its sector classification and the following mapping table:

FactSet Sector(s)	Hedging Pool	Sector ETF ISIN
Finance; Miscellaneous	XLF	US81369Y6059
Technology Services; Electronic Technology	XLK	US81369Y8030
Communications; Commercial Services; Consumer Services	XLC	US81369Y8527
Health Services; Health Technology	XLV	US81369Y2090
Consumer Non-Durables	XLP	US81369Y3080
Retail Trade; Consumer Durables	XLY	US81369Y4070
Utilities	XLU	US81369Y8865



Non-Energy Minerals	XLB	US81369Y1001
Energy Minerals	XLE	US81369Y5069
Process Industries; Industrial Services; Producer Manufacturing; Transportation; Distribution Services	XLI	US81369Y7040

- All securities from the LONG SUBINDICES that were part of an M&A deal that involved Stock terms, and all securities from the LONG SUBINDICES with an annualized volatility, over the 20 CALCULATION DAYS period up and including the SELECTION DAY, that exceeds 30%, become part of the HEDGING POOL according to the mapping above. Volatility is calculated using the formula below:

$$AV_s^{i,20} = \sqrt{\frac{\sum_{t=s}^{t=s-19} (r_t^i - \bar{r}^{i,s})^2}{19}} \times \sqrt{252}$$

if $t = AD_i$ or $t = AD_i + 1$ then $r_t^i = 0$

Where:

- $AV_s^{i,20}$ The 20 CALCULATION DAY annualized volatility of security i on SELECTION DAY s
- r_t^i The daily gross total return of security i on date t
- $\bar{r}^{i,s}$ The 20 CALCULATION DAY average gross total return of security i as of SELECTION DAY s
- AD_i The set of announcement date(s) of the deal(s) linked to security
- $AD_i + 1$ The CALCULATION DAY immediately following AD_i

- The beta between the HEDGING POOL and the corresponding sector ETF determines the weight for each ETF. If the HEDGING POOL for a certain sector ETF contains no securities, the beta will be set to zero. The beta of each sector ETF is calculated according to the formula below:

$$\beta_s^k = \begin{cases} \frac{\sum_{t=s}^{s-19} r_t^k \times r_{etf,t}^k - 20 \times \bar{r}_s^k \times \bar{r}_{etf,s}^k}{\sum_{t=s}^{s-19} (r_{etf,t}^k)^2 - 20 \times (\bar{r}_{etf,s}^k)^2} & , HP_s^k \neq \emptyset \\ 0 & , HP_s^k = \emptyset \end{cases}$$

Where:

- β_s^k The beta of the sector ETF and HEDGING POOL k on SELECTION DAY s
- r_t^k The daily total return of HEDGING POOL k on date t
- $r_{etf,t}^k$ The daily total return of the sector ETF linked to HEDGING POOL k on date t
- \bar{r}_s^k Average total return of HEDGING POOL k over the 20 CALCULATION DAYS period prior to, and including, SELECTION DAY s
- $\bar{r}_{etf,s}^k$ Average total return of the sector ETF linked to HEDGING POOL k , over the 20 CALCULATION DAYS period prior to, and including, SELECTION DAY s



HP_s^k The HEDGING POOL k on SELECTION DAY s

i) The daily total return of each HEDGING POOL is calculated as follows:

$$r_{s,t}^{l,k} = \sum_{i \in HP_s^k} W_s^i \times r_t^i$$

Where:

$r_{s,t}^{l,k}$ The daily total return of HEDGING POOL k on date t

HP_s^k The HEDGING POOL k on SELECTION DAY s

W_s^i The final weight of security i from the LONG SUBINDICES that is part of HEDGING POOL k on SELECTION DAY s

r_t^i The daily gross total return of security i on date t , calculated as follows:

$$r_t^i = \frac{P_t^i}{P_{t-1}^i} - 1$$

if $t = AD_i$ or $t = AD_i + 1$ then $r_t^i = 0$

Where:

P_t^i Total return closing price of security i on date t

P_{t-1}^i Total return closing price of security i on the CALCULATION DAY immediately preceding date t

AD_i The set of announcement date(s) of the deal(s) linked to security i

$AD_i + 1$ The CALCULATION DAY immediately following AD_i

ii) The daily total return of each sector ETF is calculated as follows:

$$r_t^{h,k} = \frac{P_t^{h,k}}{P_{t-1}^{h,k}} - 1$$

Where:

$r_t^{h,k}$ The daily total return of the sector ETF linked to HEDGING POOL k on date t

$P_t^{h,k}$ Total return closing price of the sector ETF linked to HEDGING POOL k on date t

$P_{t-1}^{h,k}$ Total return closing price of the sector ETF linked to HEDGING POOL k on the CALCULATION DAY immediately preceding date t



- The final weights of the HEDGE INDEX for each sector ETF on SELECTION DAY s is then calculated as follows:

$$W_s^k = \beta_s^k$$

The weight of the CASH INSTRUMENT in the HEDGE INDEX is determined as:

$$W_s^{h,c} = 1 - \sum W_s^k$$

Where:

W_s^k The final weight of the sector ETF linked to HEDGING POOL k on SELECTION DAY s

β_s^k The beta of the sector ETF linked to HEDGING POOL k on SELECTION DAY s

$W_s^{h,c}$ The final weight of the CASH INSTRUMENT on SELECTION DAY s for the HEDGE INDEX

LONG INDEX

On the last CALCULATION DAY of each month the LONG INDEX is rebalanced at the CLOSE OF BUSINESS of that day according to the following weights:

Identifier	Name	Weight
.HSIEMAL1	HSBC Merger Arbitrage Long Only Subindex 1	$33\frac{1}{3}\%$
.HSIEMAL2	HSBC Merger Arbitrage Long Only Subindex 2	$33\frac{1}{3}\%$
.HSIEMAL3	HSBC Merger Arbitrage Long Only Subindex 3	$33\frac{1}{3}\%$

LONG SHORT INDEX ER

On the last CALCULATION DAY of each month the LONG SHORT INDEX ER is rebalanced at the CLOSE OF BUSINESS of that day according to the following weights:



Identifier	Name	Weight
.HSIEMALT	HSBC Merger Arbitrage Long Only Index	100%
.HSIEMAHE	HSBC Merger Arbitrage Hedge Index	-100%
USD-CASH	USD cash position earning no interest	100%

LONG SHORT INDEX TR

On the last CALCULATION DAY of each month the LONG SHORT INDEX TR is rebalanced at the CLOSE OF BUSINESS of that day according the following weights:

Identifier	Name	Weight
.HSIEMALT	HSBC Merger Arbitrage Long Only Index	100%
.HSIEMAHE	HSBC Merger Arbitrage Hedge Index	-100%
.SOUSDOC	Solactive Overnight USD Cash Index	100%

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 Sections 2.1 and 2.2) the LONG SUBINDICES and the HEDGE INDEX are adjusted on the REBALANCE DAY after CLOSE OF BUSINESS. This is carried out by implementing the weights as determined on the SELECTION DAY. Each Long Subindex is rebalanced on a different day as defined in Section 6 using the weights as determined on the SELECTION DAY. The SELECTION DAY is the same across the LONG SUBINDICES.

The LONG INDEX, LONG SHORT INDEX ER and LONG SHORT INDEX TR are adjusted on the last CALCULATION DAY of every month after CLOSE OF BUSINESS, by implementing the weights as outlined in Section 2.3.

The HEDGE INDEX is rebalanced over the REBALANCE PERIOD in accordance with the Equity Index Methodology. Target weights of the HEDGE INDEX during the REBALANCE PERIOD are determined as follows:



$$tw_{i,r} = w_{i,r0} + \frac{m * (tw_{i,s} - w_{i,r0})}{3}$$

Where

$tw_{i,r}$ = target weight of security i on rebalancing day r during the rebalance period

$tw_{i,s}$ = target weight of security i as calculated on selection day s

$w_{i,r0}$ = weight of security i at the close of the first rebalance day

m = day of the rebalance period (i.e. 1, 2, or 3)

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

On each REBALANCE DAY there is a 0.02% rebalancing fee subtracted based on the total absolute change in the weights of each financial instrument entering or leaving the LONG SUBINDICES. A negative rebalancing fee of -0.02% is subtracted based on the total absolute change in the weights of each financial instrument entering or leaving the HEDGE INDEX. The change in weights of the CASH INSTRUMENT is not considered for the rebalancing fee. The rebalancing fee will be applied in compliance with the SOLACTIVE Equity Index Methodology. The formula for the application of the fees can be found in Section 4.1.

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/>.

3.2. EXTRAORDINARY REBALANCE

The INDEX is not rebalanced extraordinarily.

4. CALCULATION OF THE INDEX

4.1. INDEX FORMULA

The LONG SUBINDICES, the LONG INDEX, and the HEDGE INDEX are calculated as a gross total return index, the LONG SHORT INDEX ER is calculated as an excess return index combining the LONG SUBINDICES and HEDGE INDEX



without considering interest earned on cash, the LONG SHORT INDEX TR is calculated as a total return index combining the LONG INDEX and HEDGE INDEX with the CASH INSTRUMENT that accrues interest on a daily basis.

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.

A more detailed description of the mechanics of the index calculation formula can be found in the Equity Index Methodology under Section 1.2.

A management fee is applied to each index as described below.

For the construction of the LONG SUBINDICES a management fee is deducted on each INDEX CALCULATION DAY. The management fee is recalculated on each SELECTION DAY using the sum of weights of the new INDEX COMPONENTS excluding the CASH COMPONENT of the LONG SUBINDICES times 0.50%. The new management fee is applied as of the REBALANCE DAY after CLOSE OF BUSINESS.

For the construction of the HEDGE INDEX a management fee is deducted on each INDEX CALCULATION DAY. The management fee is recalculated on each SELECTION DAY using the sum of weights of the new INDEX COMPONENTS excluding the CASH COMPONENT of the HEDGE INDEX times -0.05%. The new management fee is applied as of the REBALANCE DAY after CLOSE OF BUSINESS.

For the construction of the LONG SHORT INDEX ER and the LONG SHORT INDEX TR a management fee of 0.50% is deducted on each INDEX CALCULATION DAY.

The management fees will be applied in compliance with the SOLACTIVE Equity Index Methodology using a divisor of 360 days.

The general index formula for each index with application of the management fee looks as follows:

$$I_t = I_{t-1} * \left(\frac{IG_t}{IG_{t-1}} \right) * \left(1 - mf_t * \frac{\Delta D_t}{360} \right)$$

Where:

- I_t The final index level on CALCULATION DAY t net of management fee
- IG_t The index level on CALCULATION DAY t gross of fees as defined in the Equity Index Methodology
- mf_t The management fee on CALCULATION DAY t as defined above



ΔD_t The number of calendar days between CALCULATION DAY t and CALCULATION DAY $t - 1$

During the REBALANCING PERIOD the rebalancing fee as defined in section 3.1 is deducted from the LONG SUBINDICES and the HEDGE INDEX according to the following formula:

$$I_t = I_{t-1} * \left(\frac{IG_t}{IG_{t-1}} \right) * \left(1 - mf_t * \frac{\Delta D_t}{360} - rf * \Delta W_t \right)$$

Where:

I_t The final index level on CALCULATION DAY t net of management and rebalancing fee

IG_t The index level on CALCULATION DAY t gross of fees as defined in the Equity Index Methodology

mf_t The management fee on CALCULATION DAY t as defined above

ΔD_t The number of calendar days between CALCULATION DAY t and CALCULATION DAY $t - 1$

rf The rebalancing fee as defined in section 3.1

ΔW_t The turnover on day t during the REBALANCING PERIOD, calculated as the sum of absolute weight changes between the closing weight on $t - 1$ and the new opening weight on t of the Index Components. Weight changes in the CASH INSTRUMENT are not taken into account

4.2. ACCURACY

The level of the INDEX will be rounded to four 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 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 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 between two regular REBALANCE DAYS. Such events 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 for each corporate action a brief definition and specifies the relevant adjustment to the INDEX variables.

Any delisting arising from an M&A related event will be handled by distributing the weight of the target based on its last close price to the CASH INSTRUMENT.

Spinoffs will be adjusted for using a special cash distribution to the mother company, and will not be added to the index.

While SOLACTIVE aims at creating and maintaining its methodology for the 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, but not conclusive, list of corporate actions as relevant for the INDEX maintenance:

- > 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 (for example the determination of the INDEX UNIVERSE (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/>.

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

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

“CALCULATION DAY” is every weekday from Monday to Friday. A day on which the New York Stock Exchange (NYSE) is not open for general business is not a CALCULATION DAY.

“CASH INSTRUMENT” is the Solactive Overnight USD Cash Index (identifier: SOUSDOC). The instrument tracks a daily rolling cash position by accruing interest at the Federal Funds Effective Rate (FEDL).

“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.

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

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

“HEDGE INDEX” is the index that contains the sector ETFs and which is the short leg of the LONG SHORT INDEX.

“HEDGING POOL” is a set of securities that are part of the LONG SUBINDICES and belong to the same sector. These are taken into consideration for the determination of the HEDGE INDEX weights.

“INDEX” refers to each index that is part of the INDEX FAMILY.

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

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

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

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



“LONG SUBINDICES” are Long Subindex 1, Long Subindex 2, and Long Subindex 3 that contain the target constituents of M&A deals that are eligible. Together they determine the the LONG INDEX.

“LONG INDEX” is the index that contains the LONG SUBINDICES, and which determines the long leg of the LONG SHORT INDEX. On the last CALCULATION DAY of each month after CLOSE OF BUSINESS the index is reset to a fixed set of weights as defined in Section 2.3.

“LONG SHORT INDEX ER” is the index that combines the LONG INDEX and HEDGE INDEX into one long/short basket that earns no interest on cash. On the last CALCULATION DAY of each month after CLOSE OF BUSINESS the index is reset to a fixed set of weights as defined in Section 2.3.

“LONG SHORT INDEX TR” is the index that combines the LONG INDEX and HEDGE INDEX with the CASH INSTRUMENT into one long/short basket that accrues interest on cash holdings. On the last CALCULATION DAY of each month after CLOSE OF BUSINESS the index is reset to a fixed set of weights as defined in Section 2.3.

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

“REBALANCE DAY” is every Wednesday of the week for the Long Subindex 1 and the Hedge Index. If that day is not a CALCULATION DAY the REBALANCE DAY will be the immediately following CALCULATION DAY. The Rebalance Day of Long Subindex 2 is the CALCULATION DAY immediately following the Rebalance Day of Long Subindex 1. The Rebalance Day of Long Subindex 3 is the CALCULATION DAY immediately following the Rebalance Day of Long Subindex 2.

“REBALANCE PERIOD” is the period starting from (and including) the REBALANCE DAY until and (including) the immediately following 2 CALCULATION DAYS (for clarification: the entire REBALANCE PERIOD is 3 CALCULATION DAYS). If the REBALANCE PERIOD overlaps with the next REBALANCE PERIOD, the next Rebalancing will not take place for the Long Sub-Indices and the Hedge Index.

“SELECTION DAY” is 3 CALCULATION DAYS before the scheduled REBALANCE DAY of the Long Subindex 1 and the Hedge Index. All LONG SUBINDICES use the same SELECTION DAY.

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

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

“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.

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