

# INDEX GUIDELINE

SOLACTIVE EUROZONE TOP 50 MARKET TREND PR 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 Solactive Eurozone Top 50 Market Trend PR Index (the "Index"). Any amendments to the rules made to the Guideline are approved by the Oversight Committee specified in Section 5.5. The Index is 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 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            | Representation of the 50 largest companies in the Eurozone, applying a trend-based leverage. |  |  |
| Regional Allocation | Global Markets   |  |  |
| Maximum Leverage    | 200%   |  |  |

#### 1.2. IDENTIFIERS AND PUBLICATION

The INDEX is published under the following identifiers:

| Name                   | ISIN         | Currency | Type    | RIC     | BBG ticker     |
|------------------------|--------------|----------|---------|---------|----------------|
| Solactive Eurozone Top |              |          |         |         |                |
| 50 Market Trend PR     | DE000SL0HP32 | EUR      | PR*/TR* | .SOEZMT | SOEZMT Index   |
| Index                  |              |          |         |         | SUEZIMI IIIUEX |

<sup>\*</sup>PR means that the Underlying Component #1 is calculated as Price Return Index as described in the Equity Index Methodology, which is available on the SOLACTIVE website: <a href="https://www.solactive.com/documents/equity-index-methodology/">https://www.solactive.com/documents/equity-index-methodology/</a>. TR\* means that the leveraged index is calculated as total return. Please see section 4.1

The INDEX is published on the website of the INDEX ADMINISTRATOR (<a href="www.solactive.com">www.solactive.com</a>) 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: <a href="https://www.solactive.com/news/announcements/">https://www.solactive.com/news/announcements/</a>.

#### 1.3. INITIAL LEVEL OF THE INDEX

The initial level of the INDEX on the 01/01/2013, the START DATE, is 1000. Historical values from the 02

/02/2023 the LIVE DATE, will be recorded in accordance with Article 8 of the BMR. Levels of the INDEX published for a period prior to the LIVE DATE have been back-tested.



#### 1.4. PRICES AND CALCULATION FREQUENCY

The level of the INDEX is calculated on each Calculation Day from 8:00 a.m. to 7:05 p.m. CET based on the INDEX PRICE of the INDEX COMPONENTS.

In addition to the intraday calculation a closing level of the INDEX for each CALCULATION DAY is also calculated. This closing level is based on the CLOSING PRICES for the INDEX COMPONENTS.

#### 1.5. LICENSING

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



## 2. INDEX SELECTION

#### 2.1. INDEX CONSTITUENTS

The INDEX is composed of the following two underlyings (each of them an UNDERLYING COMPONENT, together the INDEX COMPONENTS):

| Component | Name                    | Currency | RIC      | BBG Ticker   |
|-----------|-------------------------|----------|----------|--------------|
| 1         | Solactive Euro 50 Index | EUR      | .EURO50  | EURO50 Index |
| 2         | EURO Short Term Rate    | EUR      | EUROSTR= | ESTRON Index |

## 3. CALCULATION OF THE INDEX

#### 3.1.INDEX FORMULA

The Index Level for any Calculation Day t, denoted  $Index_t$ , is determined in accordance with the following formula, where  $Index_0 = 1000$ :

$$Index_{t} = Index_{t-1} * \left(1 + W_{t-1} * \left(\frac{UC1_{t}}{UC1_{t-1}} - 1\right) + (1 - W_{t-1}) * rate_{t-1} * \frac{DC_{t,t-1}}{365}\right)$$

With:

 $DC_{t,t-1}$  = Number of Calculation Days from (and excluding) Calculation Day t-1 to (and including) Calculation Day t

 $W_{t-1}$  = used leverage as of CALCULATION DAY t-1

 $UC1_t$  = The closing level of Underlying Component 1 for Calculation Day t

 $rate_{t-1}$  = Level of the EURO Short Term Rate for Calculation Day t-1

If no level is published for the EURO Short Term Rate for Calculation Day t-1, the EURO Short Term Rate as of the previous Calculation Day is used.



The used leverage is determined as follows:

A sequence of indicators is constructed:

$$price\_squence_t = \left\{ \mathbb{I}_{\{UC1_{t-1} < UC1_t\}}, \mathbb{I}_{\{UC1_{t-2} < UC1_t\}}, \dots, \mathbb{I}_{\{UC1_{t-252} < UC1_t\}} \right\}$$

Where generally:

$$\mathbb{I}_{\{\circ\}} = \begin{cases} 1 & \text{if } \circ \text{ is true} \\ 0 & \text{if } \circ \text{ is false} \end{cases}$$

In a second step, the sum over the sequence is taken.

$$CountDays_t = \sum price\_squence_t$$

In words:  $CountDays_t$  is equal to the number of days where the level of UNDERLYING COMPONENT 1 as of CALCULATION DAY t is larger than the level of UNDERLYING COMPONENT 1 as of CALCULATION DAYS t-1 up to t-252.

The sum will be between 0 and 252 (0 if UNDERLYING COMPONENT 1 as of CALCULATION DAY t is smaller than the UNDERLYING COMPONENT 1 on all CALCULATION DAYS t-1 up to t-252; 252 if UNDERLYING COMPONENT 1 as of CALCULATION DAY t is larger or equal to UNDERLYING COMPONENT 1 on all CALCULATION DAYS t-1 up to t-252).

The target exposure is determined based on the sum as described below:

$$W_t^{Target} = 1 + \frac{CountDays_t}{252}$$

Therefore,  $W_t^{Target}$  will be between 1 and 2.

The used exposure is determined according to:

If t is equal to the START DATE:

$$W_t = W_t^{Target}$$



If t falls strictly after the START DATE:

$$W_t = egin{cases} W_t^{Target} & \textit{if t is an Open Day} \\ W_{t-1} & \textit{if t is not an Open Day} \end{cases}$$

Where "Open Day" is defined in Section 5.

#### 3.2. ACCURACY

The level of the INDEX will be rounded to two decimal places. INDEX PRICE will be rounded to two decimal places.

#### 3.3. 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: <a href="https://www.solactive.com/documents/equity-index-methodology/">https://www.solactive.com/documents/equity-index-methodology/</a>.

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 <a href="https://www.solactive.com/news/announcements/">https://www.solactive.com/news/announcements/</a>. The INDEX adjustments will be implemented on the effective day specified in the respective notice.

#### 3.4. 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: <a href="https://www.solactive.com/documents/equity-index-methodology/">https://www.solactive.com/documents/equity-index-methodology/</a>. This document contains for each corporate action a brief definition and specifies the relevant adjustment to the INDEX variables.



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 BASKET 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

#### 3.5. 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/.



#### 3.6. 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: <a href="https://www.solactive.com/documents/disruption-policy/">https://www.solactive.com/documents/disruption-policy/</a>. 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. MISCELLANEOUS

#### 4.1. 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.

#### 4.2. 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: <a href="https://www.solactive.com/documents/methodology-policy/">https://www.solactive.com/documents/methodology-policy/</a>.

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

#### 4.3. CHANGES IN CALCULATION METHOD

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.



#### 4.4. 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: <a href="https://www.solactive.com/documents/termination-policy/">https://www.solactive.com/documents/termination-policy/</a>.

#### 4.5. 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/.



## 5. DEFINITIONS

"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.

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.

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

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

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

"INDEX COMPONENT" is each security reflected in the Section 2.1.

"INDEX PRICE" is the level calculated and disseminated by Solactive for Index Component #1.

"INDEX CURRENCY" is the currency specified in the column "Currency" in the table in Section 1.2.

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

"Oversight Committee" shall have the meaning as defined in Section 5.5.

"OPEN DAY" is a CALCULATION DAY where all RELEVANT EXCHANGES are open for their general business.

"Relevant Exchanges" are all of the following exchanges: Euronext Parts (MIC: XPAR), XETRA (XETR), Madrid Stock Exchange (XMAD), Euronext Amsterdam (XAMS), Milan Stock Exchange (XMIL), Irish Stock Exchange (XDUB), NASDAQ OMX Nordic Helsinki (XHEL), Euronext Brussels (XBRU)

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

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



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