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DISRUPTION POLICY

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1. PURPOSE

This policy sets out the rules and procedures SOLACTIVE will apply during conditions of MARKET STRESS occurring in the calculation process of INDICES administered by SOLACTIVE.

MARKET STRESS can arise due to a variety of reasons and take several forms, but generally results in inaccurate or delayed prices for one or more components of an INDEX. As a consequence, the investability and tradability of certain INDICES may be affected, and SOLACTIVE'S clients may not be able to trade or have difficulties trading relevant securities on certain markets.

SOLACTIVE INDICES may also be directly affected by suspensions or other disruptions, as one or more of the Index components may be prohibited from trading for a longer time, thereby impairing the representativeness of the INDEX. In order to maintain the quality of its Index methodologies, SOLACTIVE has decided to apply strict rules on how to deal with affected INDEX components. Accordingly, SOLACTIVE aims at creating a generic framework of resilient rules that effectively govern such incidents, which further contributes to a highly rule-based methodology and to protecting the integrity of SOLACTIVE INDICES.

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).

To the extent that the relevant INDEX guideline contains a provision that deviates from the treatment in this Disruption Policy the INDEX guideline shall apply.

2. SCOPE

This policy applies globally to all Indices administered by SOLACTIVE.



3. GENERAL PRINCIPLES

SOLACTIVE distinguishes between suspension or trading halt (see 3.1) and unplanned market closure (see 3.2) in its attention to the reasons for MARKET STRESS.

3.1. SUSPENSION OR TRADING HALT OF AN INDIVIDUAL INDEX COMPONENT

SOLACTIVE defines a '**Trading Halt**' as any situation in which the trading of an individual INDEX component is intentionally halted or the INDEX component is suspended from trading for a period of time. Such a TRADING HALT may occur for a variety of reasons, depending on the jurisdiction, the stock exchange and the relevant security. It may be ordered by a supervisory authority based on its statutory powers (e.g. the SEC orders a trading suspension according to Section 12(k) of the Securities Exchange Act 1934) or the management of an exchange (e.g. in accordance with Section 25 of the German Stock Exchange Act (*Börsengesetz*), or in accordance with their individual stock exchange rules).

3.2. UNPLANNED MARKET CLOSURE

A '**Market Closure**', in contrast, affects not only a single INDEX component but the whole market or segments of the market. MARKET CLOSURES can be further divided into planned and unplanned MARKET CLOSURES. The former refers mainly to days on which the relevant exchange is not open for trading as scheduled, while the latter may occur unplanned due to a variety of reasons, inter alia, including:

- a systems failure;
- a natural or man-made disaster;
- armed conflict;
- an act of terrorism;
- a riot or labour disruption; or
- any similar intervening circumstances.

With respect to the maintenance and calculation of its INDICES, SOLACTIVE sets out different treatments for unplanned MARKET CLOSURES without taking their reasons into account. Any planned MARKET CLOSURES do not fall within the scope of this policy; their respective treatment, if any, is defined at the level of the individual Indices in their relevant INDEX guidelines.



4. TREATMENT

4.1. TRADING HALT OR UNPLANNED MARKET CLOSURE

4.1.1 General

If an INDEX component is affected by a TRADING HALT or an unplanned MARKET CLOSURE, it generally remains in the INDEX at its last observed trading price until further notice. In this context, SOLACTIVE does not distinguish between voluntary and regulatory TRADING HALTS, nor does it take the reason for a TRADING HALT into account.

4.1.2 Monitoring

SOLACTIVE monitors the affected INDEX component and will assess in defined intervals whether the affected INDEX component shall remain in the INDEX or will be removed from the INDEX. Such assessment will be based on available information from the affected INDEX component's exchange on the review date. Review dates are

- the 20th TRADING DAY (the '**First Review Day**'); and
- the 40th TRADING DAY (the '**Second Review Day**')

following the effective date of the TRADING HALT or the unplanned MARKET CLOSURE. The review is only conducted if the TRADING HALT or the unplanned MARKET CLOSURE with respect to the affected INDEX component has not been lifted before the respective review date.

SOLACTIVE will perform an assessment as to whether the TRADING HALT or the unplanned MARKET CLOSURE is of a temporary nature, i.e. whether there is a reasonable probability that the affected INDEX component will be traded again within 60 TRADING DAYS following the effective date of the TRADING HALT or the unplanned MARKET CLOSURE, or whether there is sufficient specific information to support the assumption that the affected INDEX component will not commence trading within 60 TRADING DAYS following the effective date of the TRADING HALT or the unplanned MARKET CLOSURE. In the context of the review, SOLACTIVE will take the reason for a TRADING HALT into account.



4.1.3 Removal of Index components

The affected INDEX component will be removed from the INDEX if:

- (1) SOLACTIVE comes on the FIRST REVIEW DAY or on the SECOND REVIEW DAY to the conclusion that the affected INDEX component will not commence trading within 60 TRADING DAYS following the effective date of the TRADING HALT or the unplanned MARKET CLOSURE; or
- (2) the affected INDEX component has not resumed trading until the 60th TRADING DAY following the effective date of the TRADING HALT or the unplanned MARKET CLOSURE.

The affected INDEX component is removed at a value of zero expressed in the trading currency of the respective INDEX component.

For clarification: the decision to remove an INDEX component from the INDEX is always taken if the INDEX component has been affected by a TRADING HALT or an unplanned MARKET CLOSURE for 60 consecutive TRADING DAYS. Should an INDEX component that has been removed from an INDEX, as laid out above, resume trading after its removal, it may be eligible for re-inclusion to an INDEX depending on the selection criteria set out in the respective INDEX guideline.

The removal takes place by means of an extraordinary INDEX adjustment. SOLACTIVE shall announce the extraordinary INDEX adjustment with a notice period of at least two TRADING DAYS. The extraordinary INDEX adjustment is announced on the day on which the decision was taken. If the affected INDEX component has resumed trading by the time the removal takes effect, it will remain in the INDEX. SOLACTIVE will publish a notice on such event as soon as reasonably possible.

4.1.4 Market Closure

In the case of an unplanned MARKET CLOSURE lasting for at least 60 consecutive TRADING DAYS and affecting all or a significant percentage of the INDEX components, it may be necessary to deviate from the procedure described under 4.1.2 and 4.1.3 to safeguard the integrity of the affected INDEX. SOLACTIVE may at its own discretion decide on appropriate measures on a case-by-case basis.



4.2. TRADING HALT OR UNPLANNED MARKET CLOSURE ON THE EFFECTIVE DATE OF CORPORATE ACTIONS

If an INDEX component is affected by a TRADING HALT or an unplanned MARKET CLOSURE on the day before the effective date of a CORPORATE ACTION, the implementation of the CORPORATE ACTION is moved to the next day on which:

- (1) the INDEX is calculated; and
- (2) the affected INDEX component is not affected by a TRADING HALT or an unplanned MARKET CLOSURE.

Deviation from this procedure for individual INDICES is possible if this is clearly designated and set out in the respective INDEX guideline.

For clarification: With respect to any dividends or other distributions that are reinvested across the entire basket of INDEX components and paid by an INDEX component not affected by a TRADING HALT or an unplanned MARKET CLOSURE the reinvestment will be conducted on the effective date (the so-called ex-date) of the payment of such dividend or other distribution irrespective of whether one or more other INDEX components are affected by a TRADING HALT or an unplanned MARKET CLOSURE.

4.3. TRADING HALT OR UNPLANNED MARKET CLOSURE ON A SELECTION DAY

4.3.1 Existing Index component

4.3.1.1 Trading Halt or unplanned Market Closure less than 20 Trading Days

If on a SELECTION DAY an existing INDEX component is affected by a TRADING HALT or an unplanned MARKET CLOSURE and the effective date of the TRADING HALT or the unplanned MARKET CLOSURE is less than 20 TRADING DAYS before such SELECTION DAY the following applies:

- (1) with respect to a DIVISOR INDEX that provides for an adjustment of the total number of shares of INDEX components based on the weight of the INDEX components determined on the SELECTION DAY the total number of shares of the affected INDEX component will be fixed and will correspond to the total number of shares of the affected INDEX component on the effective date of the TRADING HALT or the unplanned MARKET CLOSURE with regard to this INDEX component. The procedure under 4.1.2 and 4.1.3 applies.



- (2) with respect to
- (a) a DIVISOR INDEX that provides for an adjustment of the total number shares of INDEX components based on the weight of the INDEX components determined on the REBALANCE DAY, and
 - (b) INDICES other than DIVISOR INDICES,
- the difference between the current weight of the affected INDEX component and the new weight determined in the selection process will be distributed among the INDEX components not affected by a TRADING HALT or an unplanned MARKET CLOSURE on the corresponding REBALANCE DAY on a pro rata basis. The affected INDEX component remains initially unaffected by the INDEX rebalance (i.e. its position is fixed). The procedure under 4.1.2 and 4.1.3 applies.

For clarification: If the affected INDEX component has resumed trading until the corresponding REBALANCE DAY, the INDEX component will be included in the INDEX in accordance with the methodology specified in the respective INDEX guideline.

4.3.1.2 Trading Halt or unplanned Market Closure more than 20 Trading Days

If on a SELECTION DAY an existing INDEX component is affected by a TRADING HALT or an unplanned MARKET CLOSURE and the effective date of the TRADING HALT or the unplanned MARKET CLOSURE is more than 20 TRADING DAYS before such SELECTION DAY the affected INDEX component will be removed from the INDEX on the corresponding REBALANCE DAY at a value of zero expressed in the trading currency of the respective INDEX component. If the affected INDEX component has resumed trading until the corresponding REBALANCE DAY, the INDEX component will be removed from the INDEX with its last available price.

For clarification: If the affected INDEX component has resumed trading until the corresponding REBALANCE DAY, the INDEX component will not be kept in the INDEX but removed, as specified above. Should an INDEX component that has been removed from an INDEX resume trading after its removal, it may be eligible for re-inclusion to an INDEX depending on the selection criteria set out in the respective INDEX guideline.

4.3.2 Potential Index component

If on a SELECTION DAY a potential INDEX component (selected for inclusion in the Index on the corresponding REBALANCE DAY) is affected by a TRADING HALT or an unplanned MARKET CLOSURE, the relevant potential INDEX component is not eligible for selection and inclusion in the INDEX.



4.4. TRADING HALT ON A REBALANCE DAY

4.4.1 Potential Index component (inclusion)

If a potential INDEX component (selected on a SELECTION DAY for inclusion in the INDEX on the corresponding REBALANCE DAY) is affected by a TRADING HALT on the REBALANCE DAY, the affected potential INDEX component is not included in the INDEX on the relevant REBALANCE DAY. The weight assigned to the affected INDEX component in the selection process will be distributed among the remaining INDEX components on a pro rata basis.

4.4.2 Existing Index component (removal)

4.4.2.1 Trading Halt less than 20 Trading Days

If an existing INDEX component (selected for removal from the Index on the corresponding REBALANCE DAY) is affected by a TRADING HALT on the REBALANCE DAY and the effective date of the TRADING HALT is less than 20 TRADING DAYS before such REBALANCE DAY, the affected INDEX component remains initially unaffected by the INDEX rebalance. The procedure under 4.1.2 and 4.1.3 applies.

This means:

- (1) with respect to a DIVISOR INDEX that provides for an adjustment of the total number shares of INDEX components based on the weight of the INDEX components determined on the SELECTION DAY the total number of shares of the affected INDEX component will be fixed and will correspond to the total number of shares of the affected INDEX component on the effective date of the TRADING HALT with regard to this INDEX component; and
- (2) with respect to
 - (a) a DIVISOR INDEX that provides for an adjustment of the total number shares of INDEX components based on the weight of the INDEX components determined on the REBALANCE DAY, and
 - (b) INDICES other than DIVISOR INDICES,the difference between the current weight of the affected INDEX component and the new weight determined in the selection process will be distributed among the INDEX components not affected by a TRADING HALT on the corresponding REBALANCE DAY on a pro rata basis. The affected INDEX component remains initially unaffected by the INDEX rebalance (i.e. its position is fixed). The procedure under 4.1.2 and 4.1.3 applies.



4.4.2.2 Trading Halt more than 20 Trading Days

If an existing INDEX component (selected for removal from the INDEX on the corresponding REBALANCE DAY) is affected by a TRADING HALT on the REBALANCE DAY and the effective date of the TRADING HALT is more than 20 TRADING DAYS before such REBALANCE DAY, the affected INDEX component will be removed from the INDEX on the REBALANCE DAY at a value of zero expressed in the trading currency of the respective INDEX component.

4.5. UNPLANNED MARKET CLOSURE ON A REBALANCE DAY

If a potential INDEX component (selected for inclusion in the INDEX on the corresponding REBALANCE DAY) or one or more existing INDEX components are affected by an unplanned MARKET CLOSURE on the REBALANCE DAY, the REBALANCE DAY is moved to the subsequent TRADING DAY on which all relevant markets are open for trading with respect to the affected potential and existing Index components. The procedure under 4.1.2 and 4.1.3 applies.

4.6. REBALANCE PERIOD

If an INDEX is rebalanced over a multiple TRADING DAYS ('Rebalance Period'), as specified in the respective INDEX guideline, and a potential INDEX component (selected for inclusion in the INDEX in the corresponding REBALANCE PERIOD) or one or more existing INDEX components are affected by a TRADING HALT or an unplanned MARKET CLOSURE on a TRADING DAY during the REBALANCE PERIOD, SOLACTIVE may at its own discretion decide on appropriate measures on a case-by-case basis, provided that the respective INDEX guideline does not specify a different treatment that would apply in such a case. SOLACTIVE will communicate and announce the respective event and the measures taken by it in accordance with Section 5.

4.7. EXTRAORDINARY AND UNFORESEEABLE EVENTS

In the case of extraordinary and unforeseeable events that are not covered by the present policy and that lead to situations in which an analogous application of the above treatments would lead to obvious and severe adverse effects on the affected INDEX, SOLACTIVE may deviate from the arrangements contained in this policy. Such cases will be escalated to the OVERSIGHT COMMITTEE, which will independently decide on an appropriate alternative treatment. Any such alternative treatment deviating from the standard arrangements will be communicated clearly and with sufficient time before it becomes effective.



5. TRANSPARENCY

SOLACTIVE will communicate and announce the respective event and the measures taken by it in a timely manner, and provide the necessary details and updates.

SOLACTIVE shall seek to provide for an implementation period that provides sufficient time for potential adjustments that users of the INDEX may need to take to account for the change.

All decisions by SOLACTIVE are to be duly recorded and published at the website <https://www.solactive.com/news/announcements/>.

6. DEFINITIONS

For the purpose of this document, the defined terms used herein shall have the following meanings:

'**BMR**' means Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on Indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014.

'**Corporate Action**' means an event that results in an adjustment to the INDEX between two scheduled REBALANCE DAYS. Such events have a material impact on the price, weighting or overall integrity of INDEX components.

'**Divisor Index**' means an INDEX for the calculation of which a divisor is applied, as described in 1.2.2 of the Solactive Equity Index Methodology and specified in the relevant INDEX guideline. The Solactive Equity Index Methodology is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>.

'**First Review Date**' is defined in section 4.1.2.

'**Index**' (or '**Indices**') refers to an index as defined in Article 3(1)(1) of the BMR.

'**Rebalance Day**' means the rebalance day specified in the relevant INDEX guideline.

'**Market Closure**' is defined in section 3.2.

'**Market Stress**' refers to any situation in which the trading of one or more INDEX components is interrupted for a period of time.

'**Oversight Committee**' means a committee composed of staff from SOLACTIVE and its subsidiaries that is responsible for decisions regarding any amendments to the rules or any termination of the INDEX.

'**Rebalance Period**' is defined in section 4.5.2.

'**Second Review Date**' is defined in section 4.1.2.

'**Selection Day**' means the selection day specified in the relevant INDEX guideline.

'**Solactive**' means Solactive AG and its subsidiaries.



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'**Trading Day**' means any day on which the affected INDEX and/or the INDEX components are regularly traded (i.e. excluding any scheduled holidays or days on which trading has been disrupted for other reasons). The TRADING DAYS are specified in the respective INDEX guidelines.

'**Trading Halt**' is defined in section 3.1.

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