

# GUIDELINE Solactive Equity Quality Investment Strategy (SOLQIS) Index

**EUR – Price Return** 

Version 1.0 dated April 4<sup>th</sup>, 2016



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This document contains the underlying principles and regulations regarding the structure and the operating of the Solactive Equity Quality Investment Strategy. Solactive AG shall make every effort to implement regulations. Solactive AG does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the Index nor the Index value at any certain point in time nor in any other respect. The Index is merely calculated and published by Solactive AG and it strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for Solactive AG – irrespective of possible obligations to issuers – to advise third parties, including investors and/or financial intermediaries, of any errors in the Index. The publication of the Index by Solactive AG is no recommendation for capital investment and does not contain any assurance or opinion of Solactive AG regarding a possible investment in a financial instrument based on this Index.

### Introduction

This document is to be used as a guideline with regard to the composition, calculation and management of the Index. Any changes made to the guideline are initiated by the Committee specified in section 1.6. The Index is calculated and published by Solactive AG. The name "Solactive" is copyrighted.

## **1 Index specifications**

The Solactive Equity Quality Investment Strategy (SOLQIS) Index – EUR – Price Return ("EQUIS", the "Index") is an Index of Solactive AG and is calculated and distributed by Solactive AG.

The Index is a price return index that tracks the performance of a quarterly rebalanced portfolio of constituent Shares of the Solactive Europe Total Market 675 Index (the "**Reference Index**").

The Index is reconstituted on a quarterly basis such that for the period from (and including) the effective date of such reconstitution (the Business Day immediately following the relevant Adjustment Day) to (and including) the next following Adjustment Day the Index will have a long exposure to the shares of the Reference Index, the weights of which shall be equal after filtering based on certain constraints.

The Index Calculator shall identify on each Selection Day, the Index Components for the Index and the reconstitution of such Index that is effective in relation to the immediately following Adjustment Day in accordance with the following steps which are set out in more detail later on in this document.

1) List the "**Score Relevant Pool Shares**": The Index Calculator shall, on each Selection Day, identify each Share which is a constituent of the Reference Index on such Selection Day and that satisfies the liquidity, dividend yield and volatility filter constraints as described below;

2) Calculate the fundamental metrics: For each of the Score Relevant Pool Shares, the Return on Invested Capital (ROIC), the Accruals Ratio, the Operational Yield, and the Dividend Yield shall be calculated.

3) Compute the normalised scores: Determine, for each of the Score Relevant Pool Shares, a "sectornormalised ratio" (respectively a sector-normalised ROIC, Accruals Ratio, Operational Yield and Dividend Yield) by adjusting such Share accruals ROIC, Accruals Ratio, Operational Yield and Dividend Yield, for the average and standard deviation of the fundamental metric of such Share's respective FactSet Economic Sector.

4) Determine and combine the sector-normalized scores into the "**Final Score**": Determine, for each of the Score Relevant Pool Shares, a Final Score by combining the sector-normalised ROIC and the sector-normalised Accruals Ratio (together the "**Quality Score**") with the sector-normalized Operational Yield and the sector-normalized Dividend Yield (together the "**Value Score**");

5) Select the final Index Components: Identify, from the Score Relevant Pool Shares, the stocks which have at least one of the four metrics available and thus a Final Score and sort them ascending based on this value. Select the 40 stocks with the largest Final Score, making sure that no more than 8 stocks from any FactSet Economy Sectors are included into the final composition of the index ("Sector Cap"). In some instances, the number of final Index Components can be less than 40. In the case where less than 40 stocks are retained due to the Sector Cap, such Sector Cap shall be increased to 9 stocks per FactSet Economy Sector. The Sector Cap may be further increased to 10 stocks if needed to reach the 40 stocks target.

6) Calculate the weights: All Index Components which made it to the final composition will be weighted equally.

The Index is a Price Return (PR) Index.

The Index is published in Euros ("EUR").

#### 1.1 Short name and ISIN

The Index is calculated and distributed under the following identifiers:

| Index name  | ISIN         | WKN    | Bloomberg    | Reuters |
|---|--------------|--------|--------------|---------|
| Solactive Equity Quality Investment<br>Strategy - Europe Index (PR) | DE000SLA15R6 | SLA15R | SOLQIS Index | .SOLQIS |

#### 1.2 Initial value

The Index is based on 1000 at the close of trading on the start date, November 2<sup>nd</sup>, 2005.

Additional historical prices have been calculated and published to Bloomberg by retrospective application of this methodology, back to November 1<sup>st</sup>, 2000.

The Index has been live since February 5<sup>th</sup>, 2016.

#### **1.3 Distribution**

The Index is published via the price marketing services of Boerse Stuttgart AG and is distributed to all affiliated vendors. Each vendor decides on an individual basis as to whether he will distribute/display the Index via his information systems.

#### **1.4 Prices and calculation frequency**

The price of the Index is calculated on each Business Day based on the prices on the respective Exchanges on which the Index Components are listed. The most recent prices of all Index Components are used. Prices of Index Components not listed in the Index Currency are translated using spot foreign exchange rates quoted by Reuters. Should there be no current price available on Reuters, the most recent price or the Trading Price on Reuters for the preceding Trading Day is used in the calculation.

The Index is calculated every Business Day from 9:00am to 10:30pm, CET. In the event that data cannot be provided to Reuters or to the pricing services of Boerse Stuttgart AG the Index cannot be distributed.

Any incorrect calculation is adjusted on a retrospective basis.

#### 1.5 Weighting

On each Adjustment Day the Index Components are equally weighted.

#### 1.6 Decision-making bodies

A Committee composed of staff from Solactive AG is responsible for decisions regarding the composition of the Index as well as any amendments to the rules (in this document referred to as the "Committee" or the "Index Committee"). The future composition of the Index is determined by the Committee on the Selection Days according to the procedure outlined in 2.1 of this document. The Committee shall also decide about the future composition of the Index and, if any Extraordinary Events should occur and the implementation of any necessary adjustments.

Members of the Committee can recommend changes to the guideline and submit them to the Committee for approval.

#### 1.7 Publication

All specifications and information relevant for calculating the Index are made available on the http://www.solactive.de web page and sub-pages.

#### 1.8 Historical data

Historical data will be maintained from November 1<sup>st</sup>, 2000.

#### 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 AG.

# 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 Day, the Index Calculator considers all shares comprising the Reference Index and retains only the stocks that fulfil the following criteria to obtain the "Score Relevant Pool Shares":

- The minimum between the 30-day and 60-day ADV for each stock should exceed EUR 5 mln.
- The Dividend Yield for each stock should, in the determination of the Index Administrator, be larger than the Market-Capitalization-weighted-average dividend yield of the 50 Euro denominated stocks with the largest Market Capitalization in the Reference Index.
- Each stock should belong to the 40% stocks featuring the lowest 12-months Realized Volatility within the Reference Index.

For each Score Relevant Pool Share, determine the following metrics:

- Return On Invested Capital (ROIC) score
- Accruals Ratio score
- Operational Yield score
- Dividend Yield score

#### 2.1.1 Return on Invested Capital Score

For each of the Score Relevant Pool Shares the Index Calculator shall determine the Return on Invested Capital Ranking Score by ranking each Score Relevant Pool Share based on its Return on Invested Capital, with 1 being the Score Relevant Pool Share with the lowest Return on Invested Capital and n being the Score Relevant Pool Share with the highest Return on Invested Capital (n being the total number of Score Relevant Pool Shares).

The Index Calculator shall then determine the Return on Invested Capital Score of each Score Relevant Pool Share in accordance with the following formula:

$$ROICS_i(t) = \overline{\mathcal{N}}\left(\frac{ROICRS_i(t)}{n+1}\right)$$

Where:

 $ROICS_i(t)$  is the Return on Invested Capital Score for each such Share i on Selection Day t;

 $\overline{\mathcal{N}}$  is Inverse Standard Normal Cumulative Distribution Function;

 $ROICRS_i(t)$  is the Return on Invested Capital Ranking Score for each such Share on Selection Day t with 1 being the Share with the lowest Return on Invested Capital and n being the Share with the highest Return on Invested Capital; and

*n* is the number of Score Relevant Pool Shares on such Selection Day t.

The higher a Score Relevant Pool Share's Return on Invested Capital, the higher its Return on Invested Capital Ranking Score and thus its Return on Invested Capital Score.

#### 2.1.2 Accruals Ratio Score

The Index Calculator shall, on each Selection Day, determine the Accruals Ratio for each Score Relevant Pool Share as the quotient of (a) as numerator and (b) as denominator, where, in relation to the Issuer of each such Score Relevant Pool Share:

(a) is the Net Operating Assets of such Issuer on Selection Day t, minus the Net Operating Assets of such Issuer on the Previous Year Reference Date t; and

(b) is the absolute value of the Net Operating Assets of such Issuer on the Previous Year Reference Date t.

The Index Calculator shall then determine the Accruals Ratio Ranking Score by ranking each Score Relevant Pool Share based on its Accruals Ratio, with 1 being the Score Relevant Pool Share with the lowest Accruals Ratio and n being the Score Relevant Pool Share with the highest Accruals Ratio (where n is the total number of Score Relevant Pool Shares).

The Index Calculator shall then determine the Accruals Ratio Score of each Score Relevant Pool Share in accordance with the following formula:

$$AS_i(t) = \overline{\mathcal{N}}\left(\frac{ARS_i(t)}{n+1}\right)$$

Where:

 $AS_i(t)$  is the Accruals Ratio Score for each such Score Relevant Pool Share i on Selection Day t;

 $\overline{\mathcal{N}}$  is Inverse Standard Normal Cumulative Distribution Function;

 $ARS_i(t)$  is the Accruals Ratio Ranking Score for each such Score Relevant Pool Share on Selection Day t with 1 being the Share with the lowest Accruals Ratio and n being the Share with the highest Accruals Ratio; and

n is the total number of Score Relevant Pool Shares on such Selection Day t.

The higher a Score Relevant Pool Share's Accruals Ratio, the higher its Accruals Ratio Ranking Score and thus its Accruals Ratio Score.

#### 2.1.3 Operational Yield

The Index Calculator shall, on each Selection Day, determine the Operational Yield of each Score Relevant Pool Share in accordance with the following formula:

$$OY_i(t) = \frac{1}{EV/EBITDA_i(t)}$$

Where:

 $OY_i(t)$  is the Operational Yield of Share i on Selection Day t; and

 $EV/EBITDA_i(t)$  is the Enterprise Value to EBITDA Ratio of Share i on Selection Day t.

The lower the Enterprise Value of a Share relative to its EBITDA  $(EV/EBITDA_i(t_S))$ , the cheaper a Share is valued and thus the higher its Operational Yield.

#### 2.1.4 Operational Yield Score

On a Selection Day and in respect of each Score Relevant Pool Share, the Index Calculator will determine the Operational Yield Score as the Inverse Standard Normal Cumulative Distribution Function applied to the ratio of (1) and (2) where:

- (1) Is the Operational Yield Ranking Score relative to such Selection Day and Share; and
- (2) Is the sum of 1 (one) and the number of Score Relevant Pool Shares.

As a formula:

$$OYS_i(t) = \overline{\mathcal{N}}\left(\frac{OYRS_i(t)}{n+1}\right)$$

Where:

 $OYS_i(t)$  is the Operational Yield Score relative to such Share i and Selection Day t;

 $\overline{\mathcal{N}}$  is Inverse Standard Normal Cumulative Distribution Function;

 $OYRS_i(t)$  is the Operational Yield Ranking Score relative to such Selection Day and Share with 1 being the Share with the lowest Operational Yield and n being the Share with the highest Operational Yield; and

n is the number of Score Relevant Pool Shares on such Selection Day t.

The higher a Score Relevant Pool Share's Operational Yield, the higher its Operational Yield Ranking Score and thus its Operational Yield Score.

#### 2.1.5 Dividend Yield

The Index Calculator shall, on each Selection Day, determine the Dividend Yield of each Score Relevant Pool Share in accordance with the following formula:

$$DY_i(t) = rac{Dividend_i(t)}{Price_i(t)}$$

Where:

 $DY_i(t)$  is the Dividend Yield of Share i on Selection Day t;

 $Dividend_i(t)$  is the Trailing 12-Month Total Dividend Per Share of Share i on Selection Day t; and

 $Price_i(t)$  is the Price of Share i on Selection Day t.

#### 2.1.6 Dividend Yield Score

On a Selection Day and in respect of a Score Relevant Pool Share, the Index Calculator will determine the Dividend Yield Score as the Inverse Standard Normal Cumulative Distribution Function applied to the ratio of (1) and (2) where:

- (1) Is the Dividend Yield Ranking Score relative to such Selection Day and Share; and
- (2) Is the sum of 1 (one) and the number of Score Relevant Pool Shares.

As a formula:

$$DYS_i(t) = \overline{\mathcal{N}}\left(\frac{DYRS_i(t)}{n+1}\right)$$

Where:

 $DYS_i(t)$  is the Dividend Yield Score relative to such Share i on Selection Day t;

 $\overline{\mathcal{N}}$  is Inverse Standard Normal Cumulative Distribution Function;

 $DYRS_i(t)$  is the Dividend Yield Ranking Score relative to such Selection Day and Share with 1 being the Share with the lowest Dividend Yield and n being the Share with the highest Dividend Yield; and

*n* is the number of Score Relevant Pool Shares on such Selection Day t.

The higher a Score Relevant Pool Share's Dividend Yield, the higher its Dividend Yield Ranking Score and thus its Dividend Yield Score.

#### 2.1.7 Final Score

The Index Calculator shall, on each Selection Day, determine the Final Score of each Score Relevant Pool Share on such Selection Day as an amount equal to:

$$FS_{i}(t) = \frac{ROICS_{i}(t) - \overline{ROICS_{sector}(t)}}{\sigma ROICS_{sector}(t)} - \frac{AS_{i}(t) - \overline{AS_{sector}(t)}}{\sigma AS_{sector}(t)} + \frac{OYS_{i}(t) - \overline{OYS_{sector}(t)}}{\sigma OYS_{sector}(t)} + \frac{DYS_{i}(t) - \overline{DYS_{sector}(t)}}{\sigma DYS_{sector}(t)}$$

Where:

FS(t) is the Final Score relative to such Share i and Selection Day t;

 $ROICS_i(t)$  is the Return on Invested Capital Score relative to such Share i and Selection Day t;

 $\overline{ROICS_{sector}(t)}$  is the Sector Average relative to the Return on Invested Capital Score and the FactSet Economy relative to such Share i on such Selection Day t;

 $\sigma ROICS_{sector}(t)$  is the Sector Standard Deviation relative to the Return on Invested Capital Score and the FactSet Economy relative to such Share i on such Selection Day t;

 $AS_i(t)$  is the Accruals Ratio Score relative to such Share i and Selection Day t;

 $\overline{AS_{sector}(t)}$  is the Sector Average relative to the Accruals Ratio Score and the FactSet Economy relative to such Share i on such Selection Day t; and

 $\sigma AS_{sector}(t)$  is the Sector Standard Deviation relative to the Accruals Ratio Score and the FactSet Economy relative to such Share i on such Selection Day t.

 $OYS_i(t)$  is the Operational Yield Score relative to such Share i and Selection Day t;

 $\overline{OYS_{Sector}(t)}$  is the Sector Average relative to the Operational Yield Score and the FactSet Economy relative to such Share i on such Selection Day t;

 $\sigma OYS_{Sector}(t)$  is the Sector Standard Deviation relative to the Operational Yield Score and the FactSet Economy relative to such Share i on such Selection Day t;

 $DYS_i(t)$  is the Dividend Yield Score relative to such Share i and Selection Day t;

 $\overline{DYS_{Sector}(t)}$  is the Sector Average relative to the Dividend Yield Score and the FactSet Economy relative to such Share i on such Selection Day t; and

 $\sigma DYS_{sector}(t)$  is the Sector Standard Deviation relative to the Dividend Yield Score and the FactSet Economy relative to such Share i on such Selection Day t.

#### 2.1.7 Selection of the final Index Components

The Index Calculator shall, on each Selection Day, determine the final composition as follows (such Shares being the "**Selection Portfolio Shares**"):

- All Score Relevant Pool Shares which have a Final Score shall be ranked according to their Final Score.
- The 40 stocks with the highest Final Score shall be selected, maintaining at the same time an 8 stock Sector Cap from each specific FactSet Economy. In some instances, the number of final Index Components can be less than 40. In the case where less than 40 stocks are retained due to the Sector Cap, such Sector Cap shall be increased to 9 stocks per FactSet Economy Sector. The Sector Cap may be further increased to 10 stocks if needed to reach the 40 stocks target.
- If there are, subsequent to this process, less than 30 Index Components eligible to enter the Index composition, the following restrictions will be lifted, gradually one by one, until 30 Index Components become available:
  - Increase in the volatility percentile by 5%; and
  - Decrease of the dividend yield threshold by 5%.
  - Repeat the process until 30 Index Components become available.

All Index Components shall be equally weighted in the final index selection on the Adjustment Day.

#### 2.2 Ordinary adjustment

The composition of the Index is adjusted according to the provisions of Section 2.1 on each Adjustment Day. The composition of the Index is reviewed on the Selection Day and necessary changes are announced promptly thereafter.

The first adjustment since the Index has been live will be made on May 4<sup>th</sup>, 2016 based on the Trading Prices of the Index Components on the Adjustment Day.

Solactive AG shall publish any changes made to the Index composition on the Selection Day and consequently with sufficient notice before the Adjustment Day.

#### 2.3 Extraordinary adjustment

The Committee may, but is under no obligation to, substitute an Index Component with a successor Index Component upon the occurrence of an Extraordinary Event as determined by Solactive AG. Any such successor Index Component shall be included in the Index after the close of business on the day when an Extraordinary Event has been determined by Solactive AG.

## **3 Calculation of the Index**

#### 3.1 Index formula

The Index is an index whose value on a Business Day is equivalent to the sum over all 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:

$$\mathit{Index}_t = \sum_{i=1}^n x_{i,t} * p_{i,t}$$

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 in Index Currency

#### 3.2 Accuracy

The value of the Index will be rounded to 2 decimal places.

The Number of Shares of the Index Components will be rounded to 6 decimal places.

Trading Prices will be rounded to six 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.

The Index 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 exante 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 Solactive AG.

Any delay in calculating the new Number of Shares of an Index Component would create problems. Therefore the procedure described above is the most appropriate.

#### 3.4 Dividends and other distributions

Only Special dividend payments and other distributions are included in the Index, as it is a Price Return 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

 $D_{i,t}$  = Special dividend 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 Calculator 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 Calculator 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 Calculator can take into account the adjustment made by an Affiliated Exchange as a result of the corporate action with regard to option and futures contracts on the respective share traded on this Affiliated Exchange.

#### 3.5.2 Capital increases

In the case of capital increases (from the company's own resources or through cash contributions) the new Numbers of Shares are calculated as follows:

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

- $x_{i,t}$  = Number of Shares of Index Component i on the day of the distribution
- x<sub>i,t-1</sub> = 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<sub>i,t-1</sub> = 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<sub>it</sub> = Reduction ratio of the company on day t

x<sub>i,t</sub> = 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<sub>i,t-1</sub> = New par value of security class i (or former number of shares)

x<sub>i,t</sub> = Number of Shares of the affected Index Component on the day of the distribution

x<sub>i,t-1</sub> = Number of Shares of the affected Index Component on the day prior to the distribution

#### 3.6 Calculation of the Index in the event of a Market Disruption Event

In the event of a Market Disruption Event, Solactive AG calculates the Index value, taking into account the market conditions prevailing at this point in time, the last quoted Trading Price for each of the Index Components as well as any other conditions that it deems relevant for calculating the Index value.

# 4. Definitions

#### 4.1 General Definitions

"Index Universe" in respect of a Selection Day are companies that have their stock selected and subsequently included in the Reference Index.

"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 Takeover bid
- 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 Calculator), as determined by the Index Calculator, and this price is used as the Trading Price of the particular Index Component until the end of the day on which the composition of the Index is next set.

In the event of the Insolvency of an issuer of an Index Component the Index Component shall remain in the Index until the next Adjustment Day. As long as a market price for the affected Index Component is available on a Business Day, this shall be applied as the Trading Price for this Index Component on the relevant Business Day, as determined in each case by the Index Calculator. If a market price is not available on a Business Day the Trading Price for this Index Component 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 Takeover bid), and the Index Component is not immediately listed, traded or quoted again on an exchange, trading or listing system, acceptable to the Index Calculator,

"Insolvency" occurs with regard to an Index Component if (A) all shares of the respective issuer must be transferred to a trustee, liquidator, insolvency administrator or a similar public officer as result of 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 **"Takeover bid"** is a bid to acquire, an exchange offer or any other offer or act of a legal person that results in the related legal person acquiring as part of an exchange or otherwise more than 10% and less than 100% of the voting shares in circulation from the issuer of the Index Component or the right to acquire these shares, as determined by the Index Calculator based on notices submitted to public or self-regulatory authorities or other information considered by the Index Calculator to be relevant.

With regard to an Index Component a "Merger" is

- (i) a change in the security class or a conversion of this share class that results in a transfer or an ultimate definite obligation to transfer all the shares in circulation to another legal person,
- a merger (either by acquisition or through forming a new structure) or a binding obligation on the part of the issuer to exchange shares with another legal person (except in a merger or share exchange under which the issuer of this Index Component is the acquiring or remaining company and which does not involve a change in security class or a conversion of all the shares in circulation),
- (iii) a takeover offer, exchange offer, other offer or another act of a legal person for the purposes of acquiring or otherwise obtaining from the issuer 100% of the shares issued that entails a transfer or the irrevocable obligation to transfer all shares (with the exception of shares which are held and controlled by the legal person), or
- (iv) a merger (either by acquisition or through forming a new structure) or a binding obligation on the part of the issuer of the share or its subsidiaries to exchange shares with another legal person, whereby the issuer of the share is the acquiring or remaining company and it does not involve a change in the class or a conversion of the all shares issued, but the shares in circulation directly prior to such an event (except for shares held and controlled by the legal person) represent in total less than 50% of the shares in circulation directly subsequent to such an event.

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

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

"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 Calculator 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 day on which the main exchange in the following countries are scheduled to be open: France (Euronext Paris), Italy (Borsa Italiana), Germany (EUREX), Netherlands (Euronext Amsterdam), Spain (Bolsa de Madrid), Sweden (Stockholm Stock Exchange), Switzerland (SIX Swiss Exchange), United Kingdom (London Stock Exchange) (or a day that would have been such a day if a market disruption had not occurred), excluding days on which trading may be ceased prior to the normal Exchange closing time. The Index Calculator is ultimately responsible as to whether a certain day is a Trading Day with regard to the Index or an Index Component or in any other connection relating to this document and may add to the list above any other country that is represented on any Business Day by 4 or more Index Components.

A "**Business Day**" is a day on which Stuttgart Stock Exchange is open for trading, notwithstanding closing prior to its Scheduled Closing Time.

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

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

The "Index Currency" is EUR.

"Market Capitalization" means, in relation to a constituent of the Reference Index and a Selection Day, the last EUR free float-adjusted market capitalisation value on such Selection Day, as determined by FactSet.

"Adjustment Day" is the first Wednesday of February, May, August and December, or if such day is not a Trading Day, the Trading Day immediately following such day.

"Selection Day" is the Business Day falling 10 Business Days before the Adjustment Day.

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 Calculator.

#### A "Market Disruption Event" occurs if

1. one of the following events occurs or exists on a Trading Day prior to the opening quotation time for an Index Component:

A) trading is suspended or restricted (due to price movements that exceed the limits allowed by the Exchange or an Affiliated Exchange, or for other reasons):

- 1.1. across the whole Exchange; or
- 1.2. in options or futures contracts on or with regard to an Index Component or an Index Component that is quoted on an Affiliated Exchange; or
- 1.3. on an Exchange or in a trading or quotation system (as determined by the Index Calculator) in which an Index Component is listed or quoted; or

B) an event that (in the assessment of the Index Calculator) generally disrupts and affects the opportunities of market participants to execute on the Exchange transactions in respect of a share included in the Index or to determine market values for a share included in the Index or to execute on an Affiliated Exchange transaction with regard to options and futures contracts on these shares or to determine market values for such options or futures contracts; 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 Calculator, whereby the Index Calculator makes his decision based on those circumstances that he considers reasonable and appropriate.

#### 4.2 Definitions relating to fundamental scores and the selection process

**"12-months Realized Volatility"** means the twelve-month security return volatility, adjusted for the holiday calendar of the exchange it trades on and for splits and spin-offs as determined and reported by FactSet.

"Accruals Ratio" means in relation to a Selection Day t and each Score Relevant Pool Share, the quantity determined as such in accordance with Section 2.1.2 above.

"Accruals Ratio Ranking Score" means in relation to a Selection Day t and each Score Relevant Pool Share, the ranking as determined by the Index Calculator of the relevant Share based on its Accruals Ratio, with 1 being the Share with the lowest Accruals Ratio and n being the Share with the highest Accruals Ratio (where n is the number of Score Relevant Pool Shares).

"Accruals Ratio Score" means in relation to a Selection Day t and each Score Relevant Pool Share, the quantity determined as such in accordance with Section 2.1.2 above.

"Average Daily Traded Volume" or "ADV" means, in respect of any Share and a day, an amount expressed in EUR equal to the quotient of 1) as the numerator and 2) as the denominator where:

- 1) is sum of the product for each of thirty/sixty weekdays immediately preceding and including such day of a) and b) where:
  - a. is the daily trading volume of such Share (determined by the Index Calculator by reference to information obtained from the relevant Exchanges or from third party suppliers of such information), or, if such day is not a Trading Day in relation to such Share, zero; and
  - b. is the official closing price in respect of such Share (if applicable, converted into EUR by reference to the closing Exchange rate on such day), or, if such day is not a Trading Day in relation to such Share, zero; and
- 2) is equal to the number of Trading Days relating to such Share in such thirty/sixty weekdays period as determined by the Index Calculator.

For the above purposes, Trading Day shall mean any day the relevant Exchange publishes a closing price in relation to such Share.

"Cash and Cash Equivalents" means the cash and cash equivalents of the relevant issuer as determined and reported by FactSet on Selection Day t.

"**Dividend Yield**" means in relation to a Selection Day t and each Score Relevant Pool Share, the quantity determined as such in accordance with Section 2.1.5 above.

"Dividend Yield Ranking Score" means in relation to a Selection Day t and each Score Relevant Pool Share, the ranking as determined by the Index Calculator of the relevant Share based on its Dividend Yield, with 1 being the Share with the lowest Dividend Yield and n being the Share with the highest Dividend Yield (where n is the number of Score Relevant Pool Shares).

"**Dividend Yield Score**" means in relation to a Selection Day t and each Score Relevant Pool Share, the quantity determined as such in accordance with Section 2.1.6 above.

"Enterprise Value to EBITDA Ratio" means, in relation to the issuer of a Share on a Selection Day, the ratio of the enterprise value to the earnings before interest, tax, depreciation and amortization as determined and reported by FactSet.

"FactSet" means FactSet Research Systems Inc. or any successor thereto.

"FactSet Economy" means, in relation to the issuer of a Share, the industrial sector classification of such issuer, as determined and reported by FactSet.

"Inputs" means, the ADV, the Accruals Ratio, the ROIC, the Operational Yield, the Dividend Yield, the Market Capitalization, the Final Score and/or any of their sub-component data (and each an "Input").

"Inverse Standard Normal Cumulative Distribution Function" means the NORMSINV function in Microsoft Excel.

"Long Term Debt" means the long term debt of the relevant issuer as determined and reported by FactSet on Selection Day t.

"Minority Interests" means the minority interests of the relevant issuer as determined and reported by FactSet on Selection Day t.

#### "Net Operating Assets" means:

- (a) the sum of relevant Long Term Debt, the relevant Short Term Debt, the relevant Minority Interests and the relevant Total Equity; minus
- (b) the relevant Cash And Cash Equivalents.

"**Operational Yield**" means in relation to a Selection Day t and each Score Relevant Pool Share, the quantity determined as such in accordance with Section 2.1.3 above.

**"Operational Yield Ranking Score"** means in relation to a Selection Day t and each Score Relevant Pool Share, the ranking as determined by the Index Calculator of the relevant Share based on its Operational Yield, with 1 being the Share with the lowest Operational Yield and n being the Share with the highest Operational Yield (where n is the number of Score Relevant Pool Shares).

"**Operational Yield Score**" means in relation to a Selection Day t and each Score Relevant Pool Share, the quantity determined as such in accordance with Section 2.1.4 above.

"Previous Year Reference Date" means the last Business Day of the 12<sup>th</sup> calendar month immediately preceding Selection Day t.

"Return on Invested Capital" or "ROIC" means in relation to the issuer of a Share, the return on invested capital of such issuer as determined and reported by FactSet on Selection Day t.

"Return on Invested Capital Ranking Score" means in relation to a Selection Day t and each Score Relevant Pool Share, the ranking as determined by the Index Calculator of the relevant Share based on its ROIC, with 1 being the Share with the lowest ROIC and n being the Share with the highest ROIC (where n is the number of Score Relevant Pool Shares).

"**Return on Invested Capital Score**" means in relation to a Selection Day t and each Score Relevant Pool Share, the quantity determined as such in accordance with Section 2.1.1 above.

"Sector Average" means in relation to an Input and:

- (a) a FactSet Economy, the average of the relevant Input value for each Score Relevant Pool Share in relation to which the FactSet Economy is equal to such FactSet Economy; and
- (b) a Share, the Sector Average relative to such Input and the FactSet Economy relative to such Share.

#### "Sector Standard Deviation" means in relation to an Input and:

- (a) a FactSet Economy, the standard deviation (Excel STDEV function) of the relevant Input value for each Score Relevant Pool Share in relation to which the FactSet Economy is equal to such FactSet Economy; and
- (b) a Share, the Sector Standard Deviation relative to such Input and the FactSet Economy relative to such Share.

"Short Term Debt" means the short term debt of the relevant issuer as determined and reported by FactSet on Selection Day t.

"Total Equity" means the total equity of the relevant issuer as determined and reported by FactSet on Selection Day t.

# **5** Appendix

#### 5.1 FactSet Economy Classification

| Nr. | FactSet Economies List |  |  |
|-----|------------------------|--|--|
| 1   | Consumer non-durables  |  |  |
| 2   | Healthcare             |  |  |
| 3   | Finance                |  |  |
| 4   | Energy                 |  |  |
| 5   | Technology             |  |  |
| 6   | Industrials            |  |  |
| 7   | Consumer durables      |  |  |
| 8   | Utilities              |  |  |
| 9   | Consumer services      |  |  |
| 10  | Basic materials        |  |  |

#### 5.2 Contact data

#### Information regarding the Index concept

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#### 5.3 Calculation of the Index – change in calculation method

The application by the Index Calculator of the method described in this document is final and binding. The Index Calculator shall apply the method described above for the composition and calculation of the Index. However it cannot be excluded that the market environment, supervisory, legal, financial or tax reasons may require changes to be made to this method. The Index Calculator may also make changes to the terms and conditions of the Index and the method applied to calculate the Index, which he deems to be necessary and desirable in order to prevent obvious or demonstrable error or to remedy, correct or supplement incorrect terms and conditions. The Index Calculator is not obliged to provide information on any such modifications or changes. Despite the modifications and changes the Index Calculator will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.