

INDEX GUIDELINE

SOLACTIVE DWS ESG AKKUMULA LC 13% VOL TARGET ER INDEX

Version 1

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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 *Solactive DWS ESG Akkumula LC 13% Vol Target ER 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).

For the avoidance of doubt, **Zurich Deutscher Herold Lebensversicherung AG** ("Zurich") has no role in the administration, calculation or publication of the INDEX which is the sole responsibility of Solactive. None of Zurich and/or any of its affiliates: (i) shall have any liability or responsibility for Solactive in connection with the performance of its role in administering, calculating and publishing the INDEX or for the performance of the INDEX; (ii) endorses, promotes or guarantees the quality, accuracy and/or completeness of the INDEX or any product linked to the INDEX; or (iii) shall have any liability in relation to any strategy, index or product (as applicable) which may be linked to the INDEX.

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

The INDEX aims to track the performance of a basket on DWS ESG Akkumula LC fund.

An additional risk control feature is built in to achieve the TARGET VOLATILITY of 13%.

The INDEX is calculated in EUR.

1.2. IDENTIFIERS AND PUBLICATION

The INDEX is published under the following identifiers:

Name	ISIN	Currency	BBG ticker	RIC
Solactive DWS ESG Akkumula LC 13% Vol Target ER Index	DE000SLOH498	EUR	SOAK13ER Index	.SOAK13ER

The INDEX is published on the website of the INDEX ADMINISTRATOR (www.solactive.com) and is, in addition, available via the price marketing services of Boerse Stuttgart GmbH and may be distributed to all 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 the INDEX on the INDEX START DATE is 100. Historical values from the Index LIVE DATE will be recorded in accordance with Article 8 of the BMR. Levels of the INDEX published for a period prior to the Index LIVE DATE have been back-tested since the Index START DATE.

1.4. PRICES AND CALCULATION FREQUENCY

The level of the INDEX is calculated for each CALCULATION DAY based on the NET ASSET VALUES of the respective 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. BASKET SELECTION

The Basket underlying the INDEX consists of 1 fund (the "Fund"), which are listed below:

Ticker	ISIN	Currency	Name
AKKMULA GR Equity	DE0008474024	EUR	DWS ESG Akkumula LC

The composition of the basket is static. Hence, no selection is taking place.

2.1. WEIGHTING OF THE BASKET COMPONENTS

The basket holdings as of the BASKET START DATE is as follows:

Ticker	ISIN	Currency	Weight
AKKMULA GR Equity	DE0008474024	EUR	100%

3. REBALANCE

3.1. ORDINARY REBALANCE

The INDEX is rebalanced potentially daily by inspecting the current level of the realized volatility of the Basket relative to the TARGET VOLATILITY.

Every day, if the realized volatility of the Basket rises, the exposure to the Basket is reduced in favor of the hypothetical cash position and, equally, when Basket realized volatility is low, the exposure to the Basket is increased, up to a maximum of 100%



4. CALCULATION OF THE INDEX

4.1. INDEX FORMULA

The Basket underlying the INDEX is calculated according to the following formula:

On the BASKET START DATE:

$$B_{BST} = 100$$

Where:

On each CALCULATION DAY t following the BASKET START DATE:

$$B_t = B_{t-1} * w \frac{NAV_t}{NAV_{t-1}}$$

Where:

B_t : The level of the Basket CALCULATION DAY t

B_{t-1} : The level of the Basket CALCULATION DAY t-1

NAV_t : The NET ASSET VALUE of the fund as of CALCULATION DAY t

w : The weight of fund as shown in Section 2.1.

The INDEX is calculated according to the following set of formulae:

On the INDEX START DATE:

$$Index_{IST} = 100$$

On each CALCULATION DAY t following the INDEX START DATE:

$$Index_t = Index_{t-1} * \left(1 + exp_{t-1} * \left(\frac{B_t}{B_{t-1}} - 1 - \frac{rate_{t-1}}{100} * DCF_{t,t-1} \right) \right)$$

Where:

$Index_t$: The Level of the INDEX as of CALCULATION DAY t

exp_{t-1} : The exposure as of CALCULATION DAY t-1

B_t : The level of the Basket CALCULATION DAY t



B_{t-1} : The level of the Basket as CALCULATION DAY t-1

$rate_{t-1}$: The latest available level of the Euro Short Term Rate (€STR) as of CALCULATION DAY t-1, expressed in %, as displayed on Bloomberg under the ticker ESTRON Index. Before 2019-10-02, for back testing purposes the Euro Overnight Index Average (EONIA) minus 0.085% was used.

$DCF_{t,t-1}$: The number of calendar days between CALCULATION DAY t-1 (excluded) and CALCULATION DAY t (included) divided by 365.

On the INDEX START DATE:

$$exp_t = target_exp_t$$

On each CALCULATION DAY t following the INDEX START DATE:

$$exp_t = \begin{cases} \min target_exp_t & \text{if } abs\left(\frac{exp_{t-1} - target_exp_{t-1}}{target_exp_{t-1}}\right) > 5\% \\ exp_{t-1} & \text{else} \end{cases}$$

The target exposure as of CALCULATION DAY t is calculated according to the following formula for each CALCULATION DAY (including the INDEX START DATE):

$$target_exp_t = \min\left(maxExposure, \frac{TV}{\sigma_{t-3}}\right)$$

Where:

maxExposure: The maximal exposure of 100%.

TV: The TARGET VOLATILITY of 13%

σ_{t-3} : The realized volatility of the Basket as determined on CALCULATION DAY t-3

The realized volatility of the Basket as of CALCULATION DAY t is calculated according to the following formula:

$$\sigma_t = \sqrt{\frac{252}{20} * \sum_{i=0}^{19} \left(\ln\left(\frac{B_{t-i}}{B_{t-i-1}}\right) \right)^2}$$

Where:

B_{t-i} : The level of the Basket as of CALCULATION DAY t-i

B_{t-i-1} : The level of the Basket as of CALCULATION DAY t-i-1



4.2. ACCURACY

The level of the INDEX will be rounded to 2 decimal places. Any other values (like volatility and exposure) are used unrounded with full precision.

4.3. 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/>.

4.4. MARKET DISRUPTION

In periods of market stress SOLACTIVE calculates its indices following predefined and exhaustive arrangements as described in the SOLACTIVE Disruption Policy, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/disruption-policy/>. Such market stress can arise due to a variety of reasons, but generally results in inaccurate or delayed prices for one or more INDEX COMPONENTS. The determination of the INDEX may be limited or impaired at times of illiquid or fragmented markets and market stress.

4.5. INDEX COMPONENT DISRUPTION EVENTS

The INDEX COMPONENTS may be subject to the following disruption events:

- **"FUND NAV EVENT"** means the latest published FUND ASSET UNDER MANAGEMENT being less than 50 Million EUR Equivalent.
- **"FUND INSOLVENCY EVENT"** means, in respect of any INDEX COMPONENT, the FUND ADMINISTRATOR of such related INDEX COMPONENT and any FUND SERVICE PROVIDER of such related INDEX COMPONENT that by reason of the voluntary or involuntary liquidation, bankruptcy, insolvency, dissolution or winding-up of or any analogous proceeding affecting the INDEX COMPONENT, (i) the holdings of a HYPOTHETICAL INVESTOR in the relevant INDEX COMPONENT are required to be transferred to a trustee, or other similar official or (ii) a HYPOTHETICAL INVESTOR in the relevant INDEX COMPONENT is legally prohibited from transferring or redeeming its holdings in the relevant INDEX COMPONENT.
- **"FUND MODIFICATION EVENT"** means, in respect of any INDEX COMPONENT, any change or modification of the FUND DOCUMENTS of the related INDEX COMPONENT which could reasonably be expected to affect



the value of such Index Component or the rights and remedies of holders of such INDEX COMPONENT from those prevailing on the INDEX START DATE.

- **"REGULATORY ACTION EVENT"** means, in respect of any INDEX COMPONENT, (1) the cancellation, suspension or revocation of the registration or approval of such INDEX COMPONENT by any relevant governmental, legal or regulatory authority; (2) any change in the accounting, legal, regulatory or tax treatments of the related INDEX COMPONENT or its FUND ADVISER that is reasonably likely to have an adverse impact on the value of such Index Component or any investor therein; or (3) the related INDEX COMPONENT or any of its FUND ADMINISTRATOR or FUND ADVISER becoming subject to any investigation, proceeding or litigation by any relevant governmental, legal or regulatory authority involving the alleged violation of applicable law for activities relating to or resulting from the operation of such INDEX COMPONENT, FUND ADMINISTRATOR or FUND ADVISER.
- **"REPORTING DISRUPTION EVENT"** means, in respect of any INDEX COMPONENT, any failure of the FUND ADMINISTRATOR of the relevant INDEX COMPONENT to deliver, or cause to deliver, information (including, but not limited to, annual and half-yearly financial reports) in accordance with the FUND DOCUMENTS, its regulatory obligations or its normal practice.
- **"STRATEGY BREACH EVENT"** means, in respect of any INDEX COMPONENT, any breach or violation of any strategy or investment guideline stated in the FUND DOCUMENTS of the related INDEX COMPONENT which could reasonably be expected to affect the value of such INDEX COMPONENT or the rights and remedies of holders of such INDEX COMPONENT from those prevailing on the INDEX START DATE.
- **"NATIONALISATION EVENT "** means, in respect of any INDEX COMPONENT, that all holdings of a HYPOTHETICAL INVESTOR in the respective INDEX COMPONENT or all or substantially all the assets of the respective INDEX COMPONENT are nationalised, expropriated or are otherwise required to be transferred to any governmental agency, authority, entity or instrumentality thereof;
- **"FUND VALUATION AND SETTLEMENT DISRUPTION EVENT"** means at any time the occurrence or continuance of any of the following events:
 - (i) **"FUND VALUATION DISRUPTION"** means any continued postponement of any date at which an INDEX COMPONENT is scheduled, according to the relevant FUND DOCUMENTS, to determine the net asset value for purposes of calculating the redemption proceeds to be paid to an investor that has submitted a valid and timely notice for redemption.
 - (ii) **"FUND SETTLEMENT DISRUPTION"** means a failure by an INDEX COMPONENT on any day to pay the full amount (whether expressed as a percentage or otherwise) of any fund redemption proceeds with respect to any holding in the respective INDEX COMPONENT scheduled to have been paid on or by such day according to the relevant FUND DOCUMENTS.
- **"FUND CURRENCY CHANGE EVENT"** means that the currency denomination of an INDEX COMPONENT is amended in accordance with its rules so that the Net Asset Value of the Fund INDEX COMPONENT on any Business Day is no longer calculated in the same currency as at the Basket Start Date;



- "MERGER EVENT" shall mean the Fund is replaced by a successor fund (the "Succession") following a merger or similar event and the Succession does have a material adverse effect on the financial instruments relating to the Index.
- **"MODIFICATION OF NAV CALCULATION METHOD EVENT"** shall mean a material modification of the method of calculating the NAV (Net Assets Value) of the INDEX COMPONENT
- **"CALCULATION AND PUBLICATION FREQUENCY CHANGE EVENT"** shall mean any change in the periodicity of the calculation or publication of the NAV of the of the INDEX COMPONENT
- **"INCORRECT CALCULATION, MISREPRESENTATION EVENT"**: following the Index Calculation Agent determines, at any time, that (i) the NAV of the Fund is inaccurate, or (ii) the reported net asset value of the Fund misrepresents the net asset value of the Fund;
- **"FUND SERVICE PROVIDER CESSATION EVENT"** means that one or more FUND SERVICE PROVIDER(s) in respect of an INDEX COMPONENT ceases to provide the service as outlined in the relevant FUND DOCUMENTS and any such FUND SERVICE PROVIDER is not immediately replaced by another acceptable service provider.

If any of the above disruption events occurred with respect to an INDEX COMPONENT, the INDEX ADMINISTRATOR may, acting in good faith and a commercially reasonable manner:

- (i) confirm (or not) the occurrence of the disruption event;
- (ii) if relevant, determine the date of occurrence of the disruption event;

if relevant, determine appropriate amendments to the Index which may include, among other things, amendments to the determination of days on which the level of the INDEX will be published, amendments to the computation of the realised volatility, and/or determination of a substitution of the affected INDEX COMPONENT. In making these decisions, the INDEX ADMINISTRATOR will use its best endeavours to give due consideration to the legitimate interests of the licensed users with a view to preventing or minimising any potential adverse impact on the licensed users.

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 acting in good faith and a commercially reasonable manner and 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](https://www.solactive.com/news/announcements/)", 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

"BASKET START DATE" is 1st March 2013.

"BENCHMARK REGULATION" shall have the meaning as defined in Section "Introduction".

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

"CALCULATION DAY" is any weekday for which a NET ASSET VALUE is scheduled to be published for all INDEX COMPONENTS.

"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 the Fund.

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

"INDEX START DATE" is 5th April 2013.

"INDEX LIVE DATE" is 8th May 2023.

The "NET ASSET VALUE" in respect of an INDEX COMPONENT and a CALCULATION DAY is the most recent published NET ASSET VALUE published for the respective INDEX COMPONENT for this CALCULATION DAY.

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

"REBALANCE DAY" is each CALCULATION DAY on which the exposure to the underlying Basket is adjusted.

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

The "TARGET VOLATILITY" is 13%.

Index Component Disruption Events Definitions

"**FUND ADMINISTRATOR**" shall mean, in respect of an INDEX COMPONENT, the fund administrator, manager, trustee or similar person with the primary administrative responsibility for such INDEX COMPONENT.

"**FUND ADVISER**" shall mean, in respect of an INDEX COMPONENT, any person appointed in the role of discretionary investment manager or non-discretionary investment adviser (including a non-discretionary investment adviser to a discretionary investment manager or to another non-discretionary investment adviser) for such INDEX COMPONENT.

"**FUND CURRENCY CHANGE EVENT**" shall have the meaning as defined in Section 4.5

"**FUND DOCUMENTS**" shall mean, in respect of any INDEX COMPONENT, the constitutive and governing documents, subscription agreements, other agreements and offering documents however described of the



related INDEX COMPONENT (including any prospectus and any offering memorandum), specifying the terms and conditions relating to such INDEX COMPONENT.

"FUND INSOLVENCY EVENT" shall have the meaning as defined in Section 4.5.

"FUND MODIFICATION EVENT" shall have the meaning as defined in Section 4.5.

"FUND NAV EVENT" shall have the meaning as defined in Section 4.5.

"FUND SERVICE PROVIDER" shall mean, in respect of an INDEX COMPONENT, any person who is appointed to provide services, directly or indirectly, for such INDEX COMPONENT, including any administrator, custodian, depositary, domiciliary agent, FUND ADMINISTRATOR, FUND ADVISER, management company, , registrar and transfer agent.

"FUND SERVICE PROVIDER CESSATION EVENT " shall have the meaning as defined in Section 4.5.

"FUND SETTLEMENT DISRUPTION " shall have the meaning as defined in Section 4.5.

"FUND VALUATION DISRUPTION" shall have the meaning as defined in Section 4.5.

"HYPOTHETICAL INVESTOR" means a hypothetical investor investing in an INDEX COMPONENT

"INCORRECT CALCULATION, MISREPRESENTATION EVENT" shall have the meaning as defined in Section 4.5

"MERGER EVENT" shall have the meaning as defined in Section 4.5.

"REGULATORY ACTION EVENT" shall have the meaning as defined in Section 4.5.

"REPORTING DISRUPTION EVENT" shall have the meaning as defined in Section 4.5.

"STRATEGY BREACH EVENT" shall have the meaning as defined in Section 4.5.

"NATIONALIZATION EVENT" shall have the meaning as defined in Section 4.5.

"MODIFICATION OF NAV CALCULATION METHOD EVENT" shall have the meaning as defined in Section 4.5.

"CALCULATION AND PUBLICATION FREQUENCY CHANGE EVENT" shall have the meaning as defined in Section 4.5.

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