

INDEX GUIDELINE

SOLACTIVE GOLD SPOT INDEX

VERSION 2.0

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INTRODUCTION

This document (the "**GUIDELINE**") is to be used as a guideline with regard to the composition, calculation and maintenance of the Solactive Gold Spot Index (the "**INDEX**"). Any amendments to the rules made to the GUIDELINE are approved by the OVERSIGHT COMMITTEE specified in Section 4.5. The INDEX is owned, calculated, and disseminated by Solactive AG ("**SOLACTIVE**"). The name "Solactive" is trademarked.

SOLACTIVE shall not, in relation to the Index, assume: (a) the role of the administrator (as defined in Article 3 (1) (6) of the Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016); or (b) the role of an administrator within the meaning of the Principles for Financial Benchmarks published by the International Organization of Securities Commissions in July 2013.

The text uses defined terms which are formatted with "SMALL CAPS". Such Terms shall have the meaning assigned to them as specified in Section 5 (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 dissemination 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 Solactive Gold Spot Index is a USD (the "**INDEX CURRENCY**") denominated INDEX. The INDEX aims to track the Gold Spot price quoted as US Dollars per Troy Ounce using time weighted average prices between **TWAP FIXING START TIME** and **TWAP FIXING END TIME**.

1.2. IDENTIFIERS AND DISSEMINATION

The INDEX is published under the following identifiers:

Name	ISIN	Currency	Type	RIC	BBG ticker
Solactive Gold Spot Index	DE000SLOFW35	USD	ER*	.SOLAGOLD	SOLAGOLD Index

*ER means that the Index is calculated as Excess Return Index.

The INDEX is disseminated on the website of SOLACTIVE (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 <https://www.solactive.com/news/announcements/>.

1.3. INITIAL LEVEL OF THE INDEX

The initial level of the INDEX on the 25th January 2022 the **START DATE**, is 1847.42 The **LIVE DATE** was on 13th June 2022. 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** at **INDEX CALCULATION TIME** based on the **TRADING PRICES** on the **TRADING VENUE** for the **INDEX COMPONENT**.

In case the **INDEX COMPONENT** is affected by a **TRADING HALT** or **MARKET CLOSURE** anytime in either **TIME PERIOD 1** or **TIME PERIOD 2**, such a day will be treated as a **MARKET DISRUPTION DAY** and the level of the INDEX will not be published by SOLACTIVE.



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. UNDERLYING ASSET

The INDEX is composed of the following underlying (the "INDEX COMPONENT"):

Name	ICE identifier	RIC	Currency	Prices Source
The Gold Spot price quoted as US Dollars per Troy Ounce	C: SXAUUSDOZ\SP	XAU=	USD	ICE

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:

$$Index_t = 0.9 * TWAP_{t, \text{TWAP FIXING START TIME}, \text{TWAP END TIME}}^{XAU} + 0.1 * TWAP_{t, \text{TWAP END TIME}, \text{TWAP FIXING END TIME}}^{XAU}$$

With:

$$Index_{\text{START DATE}} = 100$$

$$TWAP_{t, \text{TIME PERIOD 1}}^{XAU} = \frac{\sum_{k=1}^{k=N} P_{t,k}^{XAU}}{N1}$$

$$TWAP_{t, \text{TIME PERIOD 2}}^{XAU} = \frac{\sum_{k=1}^{k=N} P_{t,k}^{XAU}}{N2}$$

TIME PERIOD 1 : The Time Period between **TWAP FIXING START TIME** and **TWAP END TIME**.

TIME PERIOD 2 : The Time Period between **TWAP END TIME** and **TWAP FIXING END TIME**.

N1: Total Number of Ticks in the **TIME PERIOD 1** as of the CALCULATION DAY t .



N2: Total Number of Ticks in the **TIME PERIOD 2** as of the **CALCULATION DAY t**.

$P_{t,k}^{XAU}$: The Tick Value (using **TRADE** ticks) of **XAU** corresponding to the Tick number k as t .

3.2. ACCURACY

The level of the **INDEX** will be rounded to 2 decimal places.

3.3. 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/>.

3.4. 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 the **INDEX COMPONENT**. 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** 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: <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.

4.3. CHANGES IN CALCULATION METHOD

The application by SOLACTIVE of the method described in this document is final and binding. SOLACTIVE 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. SOLACTIVE 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. SOLACTIVE is not obliged to provide information on any such modifications or changes. Despite the modifications and changes, SOLACTIVE 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 4.2 "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/>.



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/>. SOLACTIVE shall consult or notify licensees directly, via a private channel(s), and/or in a manner as agreed between SOLACTIVE and the licensee about any amendments to the rules of the INDEX, if and to the extent a notification is provided for in the Solactive Methodology Policy.



5. DEFINITIONS

“**CALCULATION DAY**” any day on which New York Stock Exchange (NYSE) is open for general business.

“**CLOSING PRICE**” in respect of an INDEX COMPONENT and a CALCULATION DAY is a security's final regular-hours TRADING PRICE published on the TRADING VENUE and determined in accordance with the regulations of the TRADING VENUE. If the TRADING VENUE has no or has not published a CLOSING PRICE in accordance with the TRADING VENUE rules for an INDEX COMPONENT, the last TRADING PRICE will be used.

“**EARLY CLOSURE**” The market closure on any **CALCULATION DAY** of the New York Stock Exchange (NYSE) in respect of any **INDEX COMPONENT** prior to its scheduled closing time. The early closure days will be sourced from <https://www.nyse.com/markets/hours-calendars>

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

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

“**INDEX COMPONENT**” shall have the meaning as defined in Section 2.

“**INDEX CURRENCY**” is the currency specified in the column “Currency” in the table in Section 1.1.

“**INDEX CALCULATION TIME**” is 4:30 p.m. Eastern Standard Time. 1:30 p.m. Eastern Standard Time if **EARLY CLOSURE**.

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

“**MARKET DISRUPTION DAY**” shall have the meaning as defined in Section 1.4.

“**MARKET CLOSURE**”, affects not only a single index component but the whole market or segments of the market. MARKET CLOSURE can be further divided into planned and unplanned MARKET CLOSURE. 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, an armed conflict, an act of terrorism, a riot or labor 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.

“**OVERSIGHT COMMITTEE**” shall have the meaning as defined in Section 4.5.

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

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

“**TRADING PRICE**” in respect of the INDEX COMPONENT and a TRADING DAY is the most recent published price at which the INDEX COMPONENT was traded on the TRADING VENUE.



"TRADING VENUE" refers to Intercontinental Exchange or ICE.

"TRADING HALT" is any situation in which the trading of an individual index component is intentionally halted, or an 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 index component. 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).

"TWAP FIXING START TIME" 3:55 p.m. Eastern Standard Time. 12:55 p.m. Eastern Standard Time if **EARLY CLOSURE**.

"TWAP END TIME" 4:00 p.m. Eastern Standard Time. 1:00 p.m. Eastern Standard Time if **EARLY CLOSURE**.

"TWAP FIXING END TIME" 4:00:06 p.m. Eastern Standard Time. 1:00:06 p.m. Eastern Standard Time if **EARLY CLOSURE**.

"TIME PERIOD 1" shall have the meaning as defined in section 3.1.

"TIME PERIOD 2" shall have the meaning as defined in section 3.1.

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