

INDEX GUIDELINE

SOLACTIVE BBVA METAVERSE EUR INDEX

Version 1.1

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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 BBVA Metaverse EUR Index (the “**INDEX**”). Any amendments to the rules made to the **GUIDELINE** are approved by the **OVERSIGHT COMMITTEE** specified in Section 5.5. The **INDEX** is owned, calculated, administered and published by Solactive AG (“**SOLACTIVE**”) assuming the role as administrator (the “**INDEX ADMINISTRATOR**”) under the Regulation (EU) 2016/1011 (the “**BENCHMARK REGULATION**” or “**BMR**”). The name “Solactive” is trademarked.

The text uses defined terms which are formatted with “SMALL CAPS”. Such Terms shall have the meaning assigned to them as specified in Section 6 (Definitions).

The **GUIDELINE and the policies and methodology documents referenced herein contain the underlying principles and rules regarding the structure and operation of the **INDEX**. **SOLACTIVE** does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the **INDEX** nor the level of the **INDEX** at any certain point in time nor in any other respect. **SOLACTIVE** strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for **SOLACTIVE** – irrespective of possible obligations to issuers – to advise third parties, including investors and/or financial intermediaries, of any errors in the **INDEX**. The publication of the **INDEX** by **SOLACTIVE** does not constitute a recommendation for capital investment and does not contain any assurance or opinion of **SOLACTIVE** regarding a possible investment in a financial instrument based on this **INDEX**.**

*The Index is not calculated, sponsored, administered or published by Banco Bilbao Vizcaya Argentaria, S.A. (“**BBVA**”) nor does **BBVA** act as an administrator or a contributor of the Index nor does **BBVA** offer any express or implicit guarantee or assurance with regard to the calculation, publication or results of using the Index and/or Index trade mark or the Index Price at any time or in any other respect. The Index is solely calculated, administered and published by **SOLACTIVE**. For the avoidance of doubt, there is no corporate ownership relationship between **SOLACTIVE** and **BBVA**, being independent companies, and **BBVA** will not be responsible for the Index in any case.*



1. INDEX SPECIFICATIONS

1.1. SCOPE OF THE INDEX

Category	Description
Asset Class	Equity
Strategy	Representation of securities from the Developed Markets universe with business activities related to the Metaverse
Regional Allocation	Developed Markets
Rebalancing Fee	
Rebalancing Frequency	Annually

1.2. IDENTIFIERS AND PUBLICATION

The INDEX is published under the following identifiers:

Name	ISIN	Currency	Type	RIC	BBG ticker
Solactive BBVA Metaverse EUR Index PR	DE000SLOGJY2	EUR	PR*	.SBVMETEP	
Solactive BBVA Metaverse EUR Index NTR	DE000SLOGJZ9	EUR	NTR*	.SBVMETEN	SBVMETEN
Solactive BBVA Metaverse EUR Index TR	DE000SLOGJ07	EUR	GTR*	.SBVMETET	

*PR, NTR, GTR means that the Index is calculated as price return, net total return, gross total return Index as described in the Equity Index Methodology, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>

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 09/05/2016, the START DATE, is 1000. Historical values from the 07/07/2022, the LIVE DATE, will be recorded in accordance with Article 8 of the BMR. Levels of the INDEX published for a period prior to the LIVE DATE have been back-tested.

1.4. PRICES AND CALCULATION FREQUENCY

The level of the INDEX is calculated on each CALCULATION DAY from 01:00 a.m. to 10:50 p.m. CET based on the TRADING PRICES on the EXCHANGES on which the INDEX COMPONENTS are listed. TRADING PRICES of INDEX COMPONENTS not listed in the INDEX CURRENCY are converted using the current Intercontinental Exchange (ICE) spot foreign exchange rate. Should there be no current TRADING PRICE for an INDEX COMPONENT, the later of: (i) the most recent CLOSING PRICE; or (ii) the last available TRADING PRICE for the preceding TRADING DAY is used in the calculation.

In addition to the intraday calculation a closing level of the INDEX for each CALCULATION DAY is also calculated. This closing level is based on the CLOSING PRICES for the INDEX COMPONENTS on the respective EXCHANGES on which the INDEX COMPONENTS are listed. The CLOSING PRICES of INDEX COMPONENTS not listed in the INDEX CURRENCY are converted using the 04:00 p.m. New York City time WM Fixing quoted by Reuters. If there is no 04:00 p.m. New York City time WM Fixing for the relevant CALCULATION DAY, the last available 04:00 p.m. New York City time WM Fixing will be used for the closing level calculation.

1.5. LICENSING

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



2. INDEX SELECTION

On each SELECTION DAY, the INDEX ADMINISTRATOR will revise the composition of the INDEX.

In a first step, the INDEX ADMINISTRATOR determines the INDEX UNIVERSE in accordance with Section 2.1. The INDEX UNIVERSE comprises all those financial instruments which fulfill the INDEX UNIVERSE REQUIREMENTS (as specified in Section 2.1) and will constitute a starting pool from which the components of the INDEX will be selected. Based on this INDEX UNIVERSE, the new composition of the INDEX will be determined by applying the rules outlined in Section 2.2.

Each new INDEX COMPONENT will be assigned a weight as described in Section 2.3.

2.1. INDEX UNIVERSE REQUIREMENTS

The INDEX UNIVERSE is comprised of all financial instruments which fulfill the below requirements (the "**INDEX UNIVERSE REQUIREMENTS**"):

Is a **GBS INDEX COMPONENT** of the

- Solactive GBS Developed Markets Large & Mid Cap USD Index (ISIN: DE000SLA41B6),

on a SELECTION DAY, as published on the SOLACTIVE website: <https://www.solactive.com>.

The determination of the INDEX UNIVERSE is fully rule-based and the INDEX ADMINISTRATOR cannot make any discretionary decisions.

2.2. SELECTION OF THE INDEX COMPONENTS

In a first step, initial exclusions are performed according to the following rules:

1. Remove low liquidity stocks. Low liquidity is defined as less than EUR 3 million where liquidity is calculated as the minimum of 1-month and 6-month AVERAGE DAILY VALUE TRADED.
2. Remove low market capitalization stocks. Low market capitalization is defined as less than 10% of the median FREE FLOAT MARKET CAPITALIZATION of the INDEX UNIVERSE.

In case of multiple listings of a company, only the primary listing is eligible for inclusion in the INDEX.

In a second step, exclusions are performed based on the revenues of a company in the relevant FactSet RBICS Level 6 sectors (see Appendix 7.1) and its respective SECTOR BUCKETS. RBICS revenue data is provided by the DATA PROVIDER. Eligible are companies where either:

1. The sum of the last fiscal year revenues in all the RBICS Level 6 sectors in Appendix 7.1 is at least 50% of the total revenues.



2. The sum of the last fiscal year RBICS Level 6 revenues in a SECTOR BUCKET is at least 3% of the aggregate INDEX UNIVERSE revenues in the respective SECTOR BUCKET.
3. Companies classified as publicly traded partnership (PTP) are not eligible for inclusion in the INDEX.

In a third step, further exclusions are performed on the remaining stocks, based on the following rules:

1. The NFD/EBITDA ratio is calculated, where
 - NFD: total debt – cash and short term investments
 - For stocks with negative NFD, the NFD/EBITDA ratio is set to zero
 - For stocks with a negative EBITDA, OCF is used for the calculation of the ratio
 - Stocks with negative EBITDA and negative OCF are excluded
2. Each stock is assigned one SECTOR BUCKET, defined as the SECTOR BUCKET with the highest aggregate RBICS Level 6 revenues.
3. The average (AVG) and standard deviation (SD) of NFD/EBITDA are calculated for all companies in each SECTOR BUCKET.
4. A bucket exclusion threshold (BET) of $AVG + 1.5 * SD$ is calculated for each stock.
5. Stocks with $NFD/EBITDA > BET$ are excluded.

In a last step, the stocks that have not been excluded yet are selected based on the following scores, calculated for each stock:

- Bucket-Score:
 - %GEOREV: A company's geographic revenues in a country divided by total revenues of the company
 - GDP_RANK: ranking (between 1 and 0) of the ELIGIBLE COUNTRIES GDP per capita (PPP, USD)
 - ICT_RANK: ranking (between 1 and 0) of the ELIGIBLE COUNTRIES ICT goods imports (% total goods imports)
 - INT_RANK: ranking (between 1 and 0) of the ELIGIBLE COUNTRIES individuals using the internet (% of population)
 - COUNTRY_RANK: average of (GDP_RANK, ICT_RANK, INT_RANK)
 - BUCKET: The sum of the products of a company's %GEOREV and COUNTRY_RANK over all ELIGIBLE COUNTRIES
 - Z_BUCKET: z-score of BUCKET
 - RANK_BUCKET: ranking (between 1 and 0) of Z_BUCKET



- RDCPX-Score:
 - o RDCPX: $(\text{R\&D expenses} + \text{CAPEX})/\text{sales}$ divided by $(\text{SECTOR BUCKET R\&D expenses} + \text{SECTOR BUCKET CAPEX})/\text{SECTOR BUCKET sales}$, data of last fiscal year
 - o RDCPX-1: $(\text{R\&D expenses} + \text{CAPEX})/\text{sales}$ divided by $(\text{SECTOR BUCKET R\&D expenses} + \text{SECTOR BUCKET CAPEX})/\text{SECTOR BUCKET sales}$, data of fiscal year T-1
 - o RDCPX-2: $(\text{R\&D expenses} + \text{CAPEX})/\text{sales}$ divided by $(\text{SECTOR BUCKET R\&D expenses} + \text{SECTOR BUCKET CAPEX})/\text{SECTOR BUCKET sales}$, data of fiscal year T-2
 - o A_RDCPX: average of (RDCPX, RDCPX-1, RDCPX-2)
 - o Z_RDCPX: z-score of A_RDCPX
 - o RANK_RDCPX: ranking (between 1 and 0) of Z_RDCPX
- Rev-Score:
 - o SUM_REVT: sum of the revenues in all the RBICS Level 6 sectors in Appendix 7.1, data of last fiscal year
 - o SUM_REVT-1: sum of the revenues in all the RBICS Level 6 sectors in Appendix 7.1, data of fiscal year T-1
 - o SUM_REVT-2: sum of the revenues in all the RBICS Level 6 sectors in Appendix 7.1, data of fiscal year T-2
 - o CAGR_REV: CAGR between SUM_REVT and SUMREVT-2, if not available growth rate between SUM_REVT and SUMREVT-1
 - o Z_REV: z-score of CAGR_REV
 - o RANK_REV: ranking (between 1 and 0) of Z_REV
- Marg-Score:
 - o MARGT: EBIT/sales, data of last fiscal year
 - o MARGT+1: estimated EBIT/sales, data of fiscal year T+1
 - o MARGT+2: estimated EBIT/sales, data of fiscal year T+2
 - o CAGR_MARG: CAGR between MARGT+2 and MARGT divided by the respective bucket average. If MARGT+2 is not available, growth rates between MARGT+1 and MARGT are used. Any company having less than 3 analysts estimating EBIT or sale is not assigned a score.
 - o Z_MARG: z-score of CAGR_MARG
 - o RANK_MARG: ranking (between 1 and 0) of Z_MARG
- Total-Score:



- RANK_TOTAL: average of (RANK_RDCPX, RANK_REV, RANK_MARG, RANK_BUCKET)

The 50 stocks with the highest RANK_TOTAL are selected for the final INDEX, where the number of stocks from a SECTOR_BUCKET is capped at 10% of the total number of stocks in the final INDEX for the Infrastructure bucket and at 33% for all other buckets. In case of equal ranks, the security with the higher AVERAGE DAILY VALUE TRADED is assigned the higher rank. The total number of stocks (N) can be smaller than 50, if less than 50 stocks are eligible for the final INDEX. In case less than 40 stocks are eligible, the constraints are relaxed in the following order, until at least 40 stocks are selected for the final INDEX:

1. Remove the third step, the exclusion based on NFD/EBITDA ratio.
2. Decrease the first constraint in the first step, the exclusion based on the sum of the last fiscal year revenues in all the RBICS Level 6 sectors in Appendix 7.1, starting from 50%.

The selection of the INDEX COMPONENTS is fully rule-based and the INDEX ADMINISTRATOR cannot make any discretionary decision.

2.3. WEIGHTING OF THE INDEX COMPONENTS

On each SELECTION DAY each INDEX COMPONENT is assigned a weight based on modified FREE FLOAT MARKET CAPITALIZATION. To do so, the FREE FLOAT MARKET CAPITALIZATION weight of each INDEX COMPONENT is weighted by the share of SUM_REVT of total revenues of the company. Further, a single weight cap of 5% and a single weight floor of 0.3% are applied. In a next step, a HHI cap of $(1/N)*1.5$ is applied to the weights to derive the final INDEX weights. The weighting is performed by redistributing weights that are in violation of a constraint proportionally to the other INDEX COMPONENTS until all constraints are met.



3. REBALANCE

3.1. ORDINARY REBALANCE

In order to reflect the new selection of the INDEX COMPONENTS determined on the SELECTION DAY (in accordance with Section 2.1 and 2.2) the INDEX is adjusted on the REBALANCE DAY after CLOSE OF BUSINESS.

This is carried out by implementing the shares as determined on the FIXING DAY based on the weights calculated on the SELECTION DAY.

For more information on the rebalance procedure please refer to the Equity Index Methodology, which is incorporated by reference and available on the Solactive website: <https://www.solactive.com/documents/equity-index-methodology/>.

SOLACTIVE will publish any changes made to the INDEX COMPONENTS with sufficient notice before the REBALANCE DAY on the SOLACTIVE website under the section "Announcement", which is available at <https://www.solactive.com/news/announcements/>.

3.2. EXTRAORDINARY REBALANCE

The INDEX is not rebalanced extraordinarily.



4. CALCULATION OF THE INDEX

4.1. INDEX FORMULA

The INDEX is calculated as a price return, net total return and gross total return Index.

The calculation is performed according to the Equity Index Methodology, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>. The standard index formula stipulates that the level of the INDEX changes based on the change of the prices of its INDEX COMPONENTS taking into account their weight in the INDEX and any currency conversion in case the price of an INDEX the INDEX CURRENCY.

Any dividends or other distributions are reinvested back into the INDEX COMPONENT paying the dividend or other distribution opening of the effective date (the so called ex-date) of the payment of such dividend or other distribution.

A more detailed description of the mechanics of the index calculation formula can be found in the Equity Index Methodology under Section 1.2.

For the construction of the PR, NTR and GTR versions a management fee of 0.30% per annum is deducted on each INDEX CALCULATION DAY. The management fee will be applied in compliance with the Solactive Equity Index Methodology, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>.

4.2. ACCURACY

The level of the INDEX will be rounded to two decimal places. TRADING PRICES and foreign exchange rates will be rounded to six decimal places.

4.3. ADJUSTMENTS

Under certain circumstances, an adjustment of the INDEX may be necessary between two regular REBALANCE DAYS. Such adjustment has to be made if a corporate action (as specified in Section 4.4 below) in relation of an INDEX COMPONENT occurs. Such adjustment may have to be done in relation to an INDEX COMPONENT and/or may also affect the number of INDEX COMPONENTS and/or the weighting of certain INDEX COMPONENTS and will be made in compliance with the Solactive Equity Index Methodology, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>.



SOLACTIVE will announce the INDEX adjustment giving a notice period of at least two TRADING DAYS (with respect to the affected INDEX COMPONENT) on the SOLACTIVE website under the Section “Announcements”, which is available at <https://www.solactive.com/news/announcements/>. The INDEX adjustments will be implemented on the effective day specified in the respective notice.

4.4. CORPORATE ACTIONS

As part of the INDEX maintenance SOLACTIVE will consider various events – also referred to as corporate actions – which result in an adjustment to the INDEX between two regular REBALANCE DAYS. Such events have a material impact on the price, weighting or overall integrity of INDEX COMPONENTS. Therefore, they need to be accounted for in the calculation of the INDEX. Corporate actions will be implemented from the cum-day to the ex-day of the corporate action, so that the adjustment to the INDEX coincides with the occurrence of the price effect of the respective corporate action.

Adjustments to the INDEX to account for corporate actions will be made in compliance with the Equity Index Methodology, which is available on the SOLACTIVE website: <https://www.solactive.com/documents/equity-index-methodology/>. This document contains for each corporate action a brief definition and specifies the relevant adjustment to the INDEX variables.

While SOLACTIVE aims at creating and maintaining its methodology for treatment of corporate actions as generic and transparent as possible and in line with regulatory requirements, it retains the right in accordance with the Equity Index Methodology to deviate from these standard procedures in case of any unusual or complex corporate action or if such a deviation is made to preserve the comparability and representativeness of the INDEX over time.

SOLACTIVE considers following, but not conclusive, list of corporate actions as relevant for INDEX maintenance:

- > Cash Distributions (e.g. payment of a dividend)
- > Stock distributions (e.g. payment of a dividend in form of additional shares)
- > Stock distributions of another company (e.g. payment of a dividend in form of additional shares of another company (e.g. of a subsidiary))
- > Share splits (company's present shares are divided and therefore multiplied by a given factor)
- > Reverse splits (company's present shares are effectively merged)
- > Capital increases (such as issuing additional shares)
- > Share repurchases (a company offer its shareholders the option to sell their shares to a fixed price)
- > Spin-offs (the company splits its business activities into two or more entities and distributes new equity shares in the created entities to the shareholders of the former entity)



- > Mergers & Acquisitions (transaction in which the ownership of a company (or other business organizations) are transferred or consolidated with other entities, e.g. fusion of two or more separate companies into one entity)
- > Delistings (company's shares are no longer publicly traded at a stock exchange)
- > Nationalization of a company (effective control of a legal entity is taken over by a state)
- > Insolvency

4.5. RECALCULATION

SOLACTIVE makes the greatest possible efforts to accurately calculate and maintain its indices. However, errors in the determination process may occur from time to time for variety reasons (internal or external) and therefore, cannot be completely ruled out. SOLACTIVE endeavors to correct all errors that have been identified within a reasonable period of time. The understanding of "a reasonable period of time" as well as the general measures to be taken are generally depending on the underlying and is specified in the Solactive Correction Policy, which is incorporated by reference and available on the SOLACTIVE website: <https://www.solactive.com/documents/correction-policy/>.

4.6. MARKET DISRUPTION

In periods of market stress SOLACTIVE calculates its indices following predefined and exhaustive arrangements as described in the Solactive Disruption Policy, which is incorporated by reference and available on the SOLACTIVE website: <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.



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 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

“AVERAGE DAILY VALUE TRADED” means, in respect of an INDEX COMPONENT, the sum of DAILY VALUE TRADED over the specified period divided by the number of TRADING DAYS that fall in the specified period.

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

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

“BUSINESS DAY” is a day on which the TARGET2 system is open for general business.

“CALCULATION DAY” is every weekday from Monday to Friday. A day on which the TARGET2 system is not open for general business is not a CALCULATION DAY.

“CLOSE OF BUSINESS” is the calculation time of the closing level of the INDEX as outlined in Section 1.4.

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

“DAILY VALUE TRADED” means, in respect of an INDEX COMPONENT and a TRADING DAY, the product of (i) the CLOSING PRICE of such INDEX COMPONENT and (ii) the volume traded (measured as a number of shares) of such INDEX COMPONENT on the EXCHANGE during such TRADING DAY.

“DATA PROVIDER” is FactSet. For more information, please visit: <https://www.factset.com/>.

“ELIGIBLE COUNTRIES” see Appendix 7.2.

“ELIGIBLE REBALANCE DAY” is each day on which the TARGET2 system is open for general business.

“EXCHANGE” is with respect to the INDEX and every INDEX COMPONENT, the respective exchange where the INDEX COMPONENT has its listing as determined in accordance with the rules in Section 2.

“FIXING DAY” is the respective SELECTION DAY.

The **“FREE FLOAT”** is with regard to each of the securities fulfilling the INDEX COMPONENT REQUIREMENTS on a SELECTION DAY the share class-specific fraction of the total number of shares of such share class issued that are available for trading by market participants and not locked-in by long term holders, as sourced from data vendors.

The **“FREE FLOAT MARKET CAPITALIZATION”** is with regard to each of the securities fulfilling the INDEX COMPONENT REQUIREMENTS on a SELECTION DAY the share class-specific free float market capitalization. It is calculated as the multiplication of the shares outstanding in FREE FLOAT (as sourced from data vendors) with the CLOSING PRICE of the share class as of the respective SELECTION DAY.

“GBS INDEX COMPONENT” is each security reflected in the GBS Index specified in Section 2.1.

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

“HHI” is the Herfindahl-Hirschman-Index (HHI), where



$$HHI = \sum_{i=1}^N x_i^2.$$

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

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

“**INDEX COMPONENT**” is each security reflected in the INDEX.

“**INDEX COMPONENT REQUIREMENTS**” shall have the meaning as defined in Section 2.2.

“**INDEX CURRENCY**” is the currency specified in the column “Currency” in the table in Section 1.2.

“**INDEX UNIVERSE REQUIREMENTS**” shall have the meaning as defined in Section 2.1.

“**INDEX UNIVERSE**” is the sum of all financial instruments which fulfill the INDEX UNIVERSE REQUIREMENTS.

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

“**OVERSIGHT COMMITTEE**” shall have the meaning as defined in Section 5.5.

“**REBALANCE DAY**” is 16 BUSINESS DAYS after SELECTION DAY for the annual selection in April. If the determined REBALANCE DAY is not an ELIGIBLE REBALANCE DAY, the REBALANCE DAY will be the immediately following ELIGIBLE REBALANCE DAY.

“**SECTOR BUCKET**” see Appendix 7.1.

“**SELECTION DAY**” is the 15th of April. If that day is not a BUSINESS DAY, the SELECTION DAY will be the immediately following BUSINESS DAY.

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

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

“**TRADING DAY**” is with respect to an INDEX COMPONENT included in the INDEX at the REBALANCE DAY and every INDEX COMPONENT included in the INDEX at the CALCULATION DAY immediately following the REBALANCE DAY (for clarification: this provision is intended to capture the TRADING DAYS for the securities to be included in the INDEX as new INDEX COMPONENTS with close of trading on the relevant EXCHANGE on the REBALANCE DAY) a day on which the relevant EXCHANGE is open for trading (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 scheduled EXCHANGE closing time and days on which the EXCHANGE is open for a scheduled shortened period. The INDEX ADMINISTRATOR is ultimately responsible as to whether a certain day is a TRADING DAY.

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



7. APPENDIX

7.1 SECTORS

Sector Bucket	FactSet RBICS Level 6 Sector Name*
Infrastructure	Cable Equipment
Infrastructure	Other Local Area Networking Equipment
Infrastructure	General Communications Equipment
Infrastructure	Other Wireless Equipment
Infrastructure	Asset Tracking GPS Systems Manufacturing
Infrastructure	Global Positioning Systems (GPS) Manufacturing
Infrastructure	Other Satellite Equipment
Infrastructure	Carrier Core (Backbone) Equipment
Infrastructure	Customer Premises Network Security Equipment
Infrastructure	Carrier Edge Network Management Equipment
Infrastructure	General Carrier Edge (Access) Equipment
Infrastructure	General Customer Premises Equipment (CPE)
Infrastructure	Other Wide Area Networking (WAN) Equipment
Infrastructure	Cellular Site Equipment
Infrastructure	Fixed Microwave Systems Equipment
Infrastructure	Other Core Infrastructure Equipment
Infrastructure	Colocation and Data Center Services
Infrastructure	Data Transport Carrier Services
Infrastructure	Tandem Interconnection Services
Infrastructure	Enhanced Telecommunications Services Software
Infrastructure	General Communications Services
Infrastructure	Wireless Infrastructure Services
Infrastructure	Other Carrier Services
Processing	Other Communications Semiconductors
Processing	Audio Multimedia Semiconductors
Processing	Image Sensor and Image Capture Semiconductors
Processing	Multimedia Semiconductors
Processing	Video Multimedia Semiconductors
Processing	Other Specialized Semiconductors
Processing	Peripheral Semiconductors
Processing	Security and Identification Semiconductors
Processing	Desktop Computer Systems
Processing	Multi-Type Business and Personal Systems
Processing	Other Computer Systems
Processing	Portable Computer Systems
Processing	Server Computer Systems
Processing	Data Storage Media
Processing	Multi-Type Data Storage Hardware Makers
Processing	General Computer Hardware Manufacturing
Processing	Diversified Technology Hardware
Processing	Conventional Flat Panel Display Equipment
Processing	Other Computer Display Equipment
Processing	Printed Circuit Boards
Processing	Touchscreen Panels Display Equipment
Processing	Flexible Circuit Manufacturing
Processing	Other Interconnect Fabrication Services
Processing	Printed Circuit Board/Wiring Board Manufacturing
Processing	Information Storage Systems



Access	Virtual Reality Equipment
Access	Wearable Technology
Access	Home and Office Virtual Reality Software
Access	Technology Equipment Support and Installation
Access	Fitness and Exercise Equipment
Access	Electronic Payment Processing
Access	Mixed Electronic Transaction Processing
Access	Payment Processing Software
Access	Access Systems Manufacturing
Access	Diversified Electronic Security Equipment
Access	Electronic Security Identification Equipment
Access	Electronic System Security Equipment
Access	Conferencing Equipment
Access	Other Business Communications Equipment
Access	Cellular Phone Accessories Manufacturing
Access	Other Cellular Phones Manufacturing
Access	Other Mobile Equipment
Access	Smart Phone Manufacturing
Access	Computer Display Equipment
Access	Home and Office Productivity Peripherals
Access	Human Interface Peripherals
Access	Input/Output (I/O) Adapter and Interface Devices
Access	Other Peripherals
Access	Video Peripherals
Access	Audio Electronics Manufacturing
Access	Consumer Electronics Accessories Manufacturing
Access	Media Player and Recorder Equipment
Access	Other Video Electronics Equipment
Access	Video Signal Processor and Receiver Equipment
Access	Electronic Gaming/Entertainment Electronics Makers
Access	Mobile Platform Applications Software
Access	Other Handheld and Smart Phone Software
Access	Home and Office Multimedia Software
Access	Retail Industry Software

Architecture	Cryptocurrency Mining
Architecture	Blockchain Technology
Architecture	Virtual Reality Design and Engineering Software
Architecture	Credit and Information Bureaus
Architecture	Records Management Services
Architecture	Media Usage and Survey-Based Market Researchers
Architecture	Managed Hosting Services
Architecture	Other Hosting Services
Architecture	Web Development Software Makers
Architecture	General Internet and Online Services
Architecture	Web Navigation Sites and Software
Architecture	Web Portal Sites and Software
Architecture	Web Search Sites and Software
Architecture	Computer Aided Design (CAD) Software
Architecture	Mapping/Geographic Information Systems Software
Architecture	Multimedia Design and Engineering Software
Architecture	Business Intelligence Software
Architecture	Diversified Content Management Software
Architecture	Document Management Software



Architecture	Application Management Consulting
Architecture	Business Intelligence/Data Warehousing Consulting
Architecture	General Information Technology (IT) Consulting
Architecture	Multi-Tactic Enterprise Solutions Consulting
Architecture	Design, Integration and Implementation Consulting
Architecture	General Infrastructure and Network Consulting
Architecture	Network Design and Implementation Consulting
Architecture	Security and Management Consulting
Architecture	Software Design and Engineering Consulting
Architecture	Cryptocurrency Trading and Exchanges
Architecture	Data Storage Infrastructure Software
Architecture	Network Administration Software
Architecture	Network Security Access Policy Software
Architecture	Network Security Software
Architecture	Other Network Software
Content	Patent/Copyright/License Consulting Services
Content	Direct Marketing Services
Content	Other Marketing Specialists
Content	Business Event and Conference Organizers
Content	Display Advertising Services
Content	Marketing and Advertising Agencies and Networks
Content	Marketing Communications and Advertising Services
Content	Miscellaneous Marketing and Advertising Services
Content	Online Marketing and Advertising Support Services
Content	General Gaming Industries
Content	General Gaming Products and Services
Content	Horse Racing and Intertrack Wagering Systems
Content	Lottery and Pari-Mutuel Systems
Content	Online Gaming Systems
Content	Events, Tickets and Mixed-Type Recreation
Content	Online Casinos
Content	General Spectator Sports and Performing Arts
Content	Motorsports
Content	Performing Arts and Exhibitions
Content	Sports Teams and Sports Entertainment
Content	Mixed Usage Travel Arrangement and Reservation
Content	Auction Houses and Authentication Services
Content	General Consumer Content Providers
Content	General Entertainment Content Providers and Sites
Content	Console Games Software
Content	Online Game Websites and Software
Content	Other Games Software
Content	Public Relations Agencies
Content	Media Download and Streaming Digital Content Sites
Content	Communication and Collaboration Content Sites
Content	Media and Entertainment Industry Software



7.2 COUNTRIES

Australia	Malaysia
Austria	Mexico
Belarus	Netherlands
Belgium	New Zealand
Brazil	Norway
Bulgaria	Oman
Canada	Panama
Chile	Peru
China*	Poland
Costa Rica	Portugal
Croatia	Romania
Czech Republic	Russia
Denmark	Saudi Arabia
Dominican Republic	Serbia
Finland	Singapore
France	Slovakia
Germany	South Korea
Greece	Spain
Hong Kong	Sweden
Hungary	Switzerland
Ireland	Thailand
Israel	Turkey
Italy	Turkmenistan
Japan	United Arab Emirates
Kazakhstan	United Kingdom
Kuwait	United States
Lebanon	Uruguay

*includes Taiwan and Macau if available



8. HISTORY OF INDEX CHANGES

Version	Date	Description
1.0		Index Guideline creation (<i>initial version</i>)
1.1	23 March 2023	Updated RBICs sectors, PTP exclusion

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