

SIX Crypto Indices

Methodology Rulebook Governing SIX Crypto Indices

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1 Introduction

This document is an integral part of the SIX Index Rules. The Swiss Index Rules are outlined in a Methodology Rulebook for Equity and Real Estate Indices, Bond Indices, Strategy Indices, Swiss Reference Rates, and this Rulebook about Crypto Indices. The initial section 'General principles' outlines the guiding principles underlying the rulebook and the application of the rules. The next section provides an overview of the definitions used in this rulebook. It is followed by a section on the calculation of indices and the outlines on the maintenance of Index components, Composition. The document closes with sections on correction policy, governance, external communication and trademark protection.

2 General Principles

This rulebook is based on the general principles stated below. SIX uses the principles as an orientation and guiding principles for unforeseen circumstances that are not covered by the rulebook or in case of doubt.

- **Representative**: The development of the market is represented by the Index.
- **Tradable**: The Index components are tradable in terms of size and market.
- **Replicable**: The development of the Index can be replicated in practice with a portfolio.
- **Stable**: High Index continuity.
- **Rule-based**: Index changes and calculations are rule-based.
- **Projectable**: Changes in rules are applied with appropriate notification period (usually at least 2 trading days) no retrospective rule changes.
- **Transparent**: Decisions are based on public information.

3 Definitions

3.1 Instrument Definitions

SIX offers Indices which replicate the development of a weighted group of Instruments. The underlying Instruments in this rulebook are Crypto Currencies and their attributes are defined underneath:

Term	Definition
Average Rate	An Average Rate is a volume weighted average Price, calculated by using Crypto Currency Pairs over a certain timeframe. The specific calculation is defined in more detail in section 6.
Crypto Currency	A Crypto Currency is a digital currency which is most commonly distributed across a decentralized network (distributed ledger). Crypto Currencies are generally not issued by governments or another central authority. In this rulebook, the term Crypto Currency is used for Crypto Assets as well.
Crypto Currency Pair	A Crypto Currency Pair is the trading pair available for each single Crypto Currency. These can be Crypto/Crypto pairs, such as Bitcoin/Ether or they can be Crypto/Fiat pairs, such as Bitcoin/USD.
Fork	A Fork is basically a split in the blockchain network, usually by introducing changes to the software protocol. Depending on the impact of those changes, the term hard Fork (software change which results in the previous version not being accepted any more) or soft Fork (software change that is backward compatible) are used.
Fiat Currency	Fiat Currency (Fiat) are traditional currencies such as the Swiss Franc, the Euro, or the US Dollar. These are issued by governments and are not linked to any other asset.
Meme Coin	Meme Coins are Crypto Currencies inspired by memes or jokes on the Internet and social media; they are largely dependent on community sentiment and arbitrarily subject to outside influences like celebrity tweets. They rely on emotional connections rather than unique technology or services to create value and attract investors: most of them are created with no clear objective or substance other than being a fun alternative to mainstream Crypto Currencies. Most Meme Coins are largely valueless outside the Cryptocurrency world and are generally not accepted as a form of payment for goods and services. Typically Meme Coins do not have an established ecosystem to support them and have a very high or unlimited supply.
Number of Coins	Crypto Currencies usually have a fixed Number of Coins that can be created. In this rulebook the term Number of Coins refers to the coins that are currently in circulation.
Price	The Prices used for a Crypto Currency Pair are the last traded Price available on an eligible Crypto Exchange.
Volume Weighted Median Price (VWMP)	A weighted median of a sample of Price and volume data is the 50% weighted percentile. The Indices in this rulebook are weighted according to the trade volume. The Volume Weighted Median Price is calculated by using Crypto Currency Pairs over a certain timeframe. The specific calculation is defined in more detail in section 6.

3.2 Index Definitions

Regarding Crypto Indices, this document is using the following definitions:

Term	Definition
Base Date	The Base Date is the date when the Base Value is set. Usually this happens at the start of the Index history.
Base Value	The Base Value of an Index is the value it is standardized to. It is common to set a Base Value to 100 or 1000.
Crypto Exchanges	A Crypto Exchange in the context of this rulebook is a platform that allows trading of Crypto Currency Pairs. The requirements that Crypto Exchanges need to meet in order to be used as a source for the Indices in this rulebook, are outlined in Section 6 and might vary from Index to Index. In this rulebook, the terms "Crypto Exchange" and "Exchange" are used interchangeably.

Term	Definition
Cut-off Date	The data to select the Index Components from its universe is fixed at the Cut-off Date. Changes to the data that occur after the close of that trading day are only considered at the subsequent Index review.
Effective Date	Ordinary and extraordinary Index adjustments are considered in the Index calculation from the Effective Date onward.
Eligibility Criteria	The Eligibility Criteria are a set of conditions which a Crypto Currency needs to fulfil to be selected for a Crypto Index. The conditions are outlined in section 6.
Index	An Index measures the development of a defined market. The market is represented by Instruments with defined characteristics and are selected by certain rules into an Index. Index in the context of this rulebook means Index which uses Crypto Currency Pairs as input data.
Index Component	All Instruments which are part of the Index
Index Composition	The Index Composition consists of the Index Components. The Index Components are selected by applying the selection rules of the Index.
Index Currency	Each Index is calculated in one or more currencies. In instances where an Index Component is traded in a Fiat Currency other than the one(s) used for calculating the Index, it is necessary to convert this Component's value into the relevant Index Currency for inclusion in the Index calculation.
Index Universe	The Index Universe is a group of Instruments which share common characteristics. The Index Universe is the basis to select the Index Composition.
Instrument	An Instrument is usually a security which shares common characteristics. In the context of this rulebook, the term 'Instrument' solely refers to Crypto Currency Pairs.
Trade Window	A time window of variable length (for example 60 minutes, 60 seconds and so on) during which trades are collected from the Exchanges for the purpose of calculating the Average Rate Prices.
Top of the Book	The Top of the Book data are Top Ask (Lowest Ask) and Top Bid (Highest Bid) from orderbook for the relevant pair from an Exchange.

4 Calculation of Index Values

4.1 Laspeyres Formula

SIX measures most of its Indices based on a formula which goes back to Prof. Etienne Laspeyres who was ordinarius for Political Economy at the University of Basel from 1864 to 1866. Prof. Laspeyres' invention measures the change of value in a basket of goods relative to its value at inception.

Conceptionally the Index formula to calculate Index levels (I) at a given point in time (t) divides a market value (M) by a divisor (D) as follows:

	Legend	:
М.	Ι	Index value
$I_t = \frac{M_t}{D_t}$	М	Market value
U	D	Divisor
	t	Time

The divisor is used twofold: First, it is used to standardize the Index value to a meaningful number at inception of the Index (Base Value). It is carried forward over time from the day when the Base Value of the Index was set. Second, it is used to outbalance external effects that lead to shifts in market value (ΔM) throughout the life of the Index (e.g. update in Number of Coins).

$$D_t = rac{M_{t-1} - \Delta M_t}{I_{t-1}}$$
 Legend:
 ΔM Change in market value

5 Index Maintenance

5.1 Ordinary Index Review

Unless described differently in the Index specific sections in section 6, the Crypto Indices are reviewed four times a year based on data available on the Cut-Off Date. Any resulting changes are implemented on the third Friday of the subsequent month (the "Implementation Date"):

Quarter	Cut-Off-Date	Implementation Date
First	Last trading day of February	Third Friday in March
Second	Last trading day of May	Third Friday in June
Third	Last trading day of August	Third Friday in September
Fourth	Last trading day of November	Third Friday in December

The additions and deletions to/from the Crypto Indices as well as the new Number of Coins per Crypto Currency will be announced one week prior to the Implementation Date.

5.2 Extra-Ordinary Market Events

5.2.1 Forks

Forks are generally not included in the Crypto Indices unless explicitly described for a specific Index.

5.2.2 Trade Suspensions and Market Distortions

There are certain circumstances which might require extra-ordinary adjustments to the Crypto Indices. These circumstances include, but are not limited to:

- Longer or recurring outages of an Crypto Exchange or trading venue
- Misconduct of a Crypto Exchange or with a Crypto Currency has been noticed
- Sharp decline in trading volumes of Crypto Currencies, certain Crypto Exchanges/trading venues or even larger areas of the Crypto market in general
- Implementation of investment restrictions for international investors in certain countries or for certain Exchanges
- A Crypto Currency does not trade any more permanently or for an extended period of time
- Technological failure

In each of these cases, the last available data will normally be used. In extreme cases a deviation from the rules defined in this rulebook can occur, for example, shifting the schedule of a regular Index review.

6 Indices

6.1 SIX Crypto Market Index 10

6.1.1 Objective of the Index

The objective of the SIX Crypto Market Index 10 is to reliably measure the performance of the largest and most liquid Crypto Assets and provide an investable benchmark for this asset class. The Prices for the Crypto Assets are obtained from multiple Crypto Exchanges and trading venues The Index calculation takes place as described in section 6.1.2, every minute on each trading day of SIX from 6 am to 9:55 pm Zurich time. The SIX trading calendar can be found on the SIX website.

One Average Rate is calculated for each selected Crypto Asset, which uses Prices of this one Crypto Asset against one or more Fiat Currencies, sourced from various Exchanges (the "SIX Crypto Average Rates"). In addition, one Index is calculated which includes multiple Crypto Assets, weighted by their market capitalization (the SIX Crypto Market Index 10).

The Index membership of Crypto Assets as well as Crypto Exchanges are reviewed on a quarterly basis.

6.1.2 Calculation Method

6.1.2.1 SIX Crypto Average Rates

The input Prices used for the SIX Crypto Average Rates are all traded Prices of selected Crypto Currency Pairs retrieved from eligible Crypto Exchanges. The benchmark is determined on the basis of readily available data provided by the Crypto Exchanges. Contributed data or submissions are not considered.

Each SIX Crypto Average Rate is calculated as the volume weighted average Price ("VWAP") over the last 60 minutes prior to the current Index calculation time using the above-mentioned input Prices. Crypto Currencies that are not expressed in the Index Currency are converted to the Index Currency on the basis of readily available data.

$$AR_{t} = \frac{\sum_{i=1}^{EX} \sum_{j=t-60m}^{t} p_{i,j,fiat} \cdot v_{i,j,fiat} \cdot x_{t}}{\sum_{i=1}^{EX} \sum_{j=t-60m}^{t} v_{i,j,fiat}}$$

Legend:	
AR _t :	SIX Crypto Average Rate (VWAP at t)
t:	Current calculation time, 1min intervals
EX:	Number of Exchanges
t-60m:	60 minutes prior to t
p _{i,j,Fiat} :	Crypto to Fiat rate on Exchange i at time j (1 unit of Crypto vs Fiat)
V _{i,j,Fiat} :	Volume of trade p _{i,j,Fiat}
X _t :	Fiat to Fiat rate at time t (e.g. EUR/USD)

6.1.2.2 SIX Crypto Market Index 10

The input Prices used for the calculation of the SIX Crypto Market Index 10 are the SIX Crypto Average Rates, calculated in the Index Currency, as defined above.

$\sum_{k=1}^{m} AR_{k,k} \cdot Nu$	mber of Coins,	Legend:	
$I_t = \frac{\sum_{k=1}^{k} k_{k,t}}{k_{k,t}}$	D_d	lt:	SIX Crypto Market 10 Index at time t
D		t:	Current calculation time
		m:	Number of Crypto Assets in It: (m ≤ 10)
		ARk,t:	SIX Crypto Average Rate k at time t
		Number of Coins k:	Units in circulation for Crypto Currency k
		Dd:	Divisor on day d

6.1.3 Index Composition

6.1.3.1 Eligibility Criteria for Exchanges and Crypto Currencies

A set of Exchanges is selected to retrieve Crypto rates from multiple sources. An Exchange should meet the following criteria to be eligible:

- Support trading for Crypto Assets vs USD/EUR/JPY
- Investable by international asset managers
- Located in the jurisdictions of FATF members (Financial Action Task Force) or Moneyval member states
- Providing a market data feed via API to source data on an ongoing basis including Price, volume and time stamps
- Stable service operations and in business for at least 18 months
- Significant market share in the overall volumes of the Crypto Asset market
- Information about the Exchange will have to be available in English, including a clear statement where the Exchange is located and where the place of jurisdiction is
- Exchanges have a sustainable business model in place, e.g. sourcing revenues through trading fees

The list of eligible Crypto Exchanges is available at:

https://indexdata.six-group.com/crypto/crypto_market_index_10.html

The Index Universe is defined by all Crypto Currency Pairs trading on the eligible Crypto Exchanges that meet the following criteria:

- Application of globally consistent data structures (e.g. blockchain)
- Crypto Asset pairs vs USD, EUR or JPY available
- Quoted on at least 2 eligible Crypto Exchanges
- Trading on an Exchange at least once a day
- Not primarily designed to ensure anonymity
- No Index , no pegged coins (USDT, Gold, etc.)

- A reliable multi-signature hardware wallet solution exists
- Technological maturity, demonstrated by continuous stable operations for more than three months (for Forks, the operational time of the originating chain applies)
- Only Meme Coins that are identified as such by the Index Management and included in the whitelist displayed in the appendix (12.1).

6.1.3.2 Component Selection

For Crypto Currencies to be selected for the SIX Crypto Market Index 10, the following minimum thresholds apply:

- Average market capitalization > 1bn USD over the last 30 days (last Price times units in circulation)
- Average daily liquidity > 500.000 USD over last 30 days (based on volume data from eligible Exchanges) ¹

The assets fulfilling the inclusion criteria above are ranked by their market capitalization in descending order. All assets up until rank 10 are selected, thus becoming constituents of the SIX Crypto Market Index 10. In a case where less than 10 assets fulfill the inclusion criteria, the SIX Crypto Market Index 10 will be calculated with less than 10 constituents and simply include all assets fulfilling the inclusion criteria.

Each Crypto Currency Pair which is trading versus EUR, USD or JPY will be calculated as an individual SIX Crypto Average Rate. Prices are sourced from selected Exchanges only.

6.1.4 Weighting Scheme

The weight of Crypto Currency in the SIX Crypto Market 10 Index is based on its market capitalization, i.e. the product of its Price and the Number of Coins.

6.1.5 Standardization/Index History

The SIX Crypto Market Index 10 was standardized on 31 December 2016 with a Base Value of 1000 points. Its divisor (see section 4) was established such that the result of dividing the total market capitalization by the divisor was an Index level of 1'000 points.

The Index levels prior to the Index launch date have been calculated using average closing Prices from eligible Exchanges (instead of volume weighted average Prices). From the Base Date of the Index until the close of business on 25 January 2018, the Index levels have been calculated using a cap factor of 50%. From 26 January 2018 onwards, the methodology outlined in this rulebook has been applied.

6.1.6 Final Settlement Value (FSV)

A Final Settlement Value (FSV) is disseminated for the SIX Crypto Market Index 10, which can be used for the evaluation of financial products linked to this Index. The Index value calculated at 12:00 Zurich time in accordance with the formula in section 6.1.2.2, will be flagged as FSV for market participants to identify this value specifically.

6.2 SIX Crypto Market Index 10 Real-Time

The SIX Crypto Market Index 10 Real-Time is the real-time version of the SIX Crypto Market Index 10 and aims to capture the short-term Price changes of the largest and most liquid Crypto Assets. The SIX Crypto Market Index 10 Real-Time adopts the same selection and weighting rules as the parent Index SIX CMI10 (see 6.1.3). The Index calculation takes place as described in section 6.2.1, on a second-by-second basis, 24 hours a day, every day.

¹ The liquidity threshold has been of 20mn USD from the Base Date of the Index until (and including) the June 2018 ordinary review and 5mn USD from the September 2018 ordinary review until (and including) the March 2023 ordinary review. The 500.00 USD threshold applies from the June 2023 ordinary review.

6.2.1 Calculation Method

6.2.1.1 SIX Average Rates Real-Time

The input Prices used for the SIX Crypto Average Rates Real-Time are primarily all traded Prices of selected Crypto Currency Pairs retrieved from eligible Crypto Exchanges, converted to Index Currency on the basis of readily available data if expressed in a different currency. In specific cases, when no traded Prices are available, Top of The Book quotes are used.

Each SIX Crypto Average Rates Real-Time Index is calculated as follows:

$\sum_{i=1}^{EX} \sum_{i=t-60s}^{t} p_{i,i,fiat} \cdot v_{i,i,fiat} \cdot x_t$	Legend:	
$ARL_t = \frac{\sum_{i=1}^{EX} \sum_{j=t-60s}^{t} v_{i,j,fiat}}{\sum_{i=1}^{EX} \sum_{j=t-60s}^{t} v_{i,j,fiat}}$	ARL _t :	SIX Crypto Average Rates Real-Time (VWAP at t) in USD
	t:	Current calculation time, 1sec intervals
	EX:	Number of Exchanges
	t-60s:	60 seconds prior to t
	p _{i,j,Fiat} :	Crypto to Fiat rate on Exchange i at time j (1 unit of Crypto vs Fiat)
	Vi,j,Fiat:	Volume of trade $p_{i,j,Fiat}$
	Xt:	Fiat to Fiat rate at time t (e.g. EUR/USD)

In case no trades are available in the previous 60 seconds, the last value (ARL_{t-1}) is analysed:

• If the last value, ARL_{t-1} is between the median of the best Ask quotes (A_{median}) and the median of the Best Bid quotes (B_{median}) from the eligible Crypto Exchanges:

$$B_{median} \leq ARL_{t-1} \leq A_{median}$$

then the last Index value is used.

• If the last Index value is outside of the above mentioned range:

$$ARL_{t-1} > A_{median} \text{ or } ARL_{t-1} < B_{median}$$

then the current mid-quote is used, calculated as the simple average between A_{median} and B_{median} :

$$ARL_t = \frac{A_{median} + B_{median}}{2}$$

6.2.1.2 SIX Crypto Market Index 10 Real-Time

The input Prices used for the calculation of the SIX Crypto Market Index 10 Real-Time are the SIX Crypto Average Rates Real-Time, calculated in the Index Currency, as defined above.

$$I_{t} = \frac{\sum_{k=1}^{m} ARL_{k,t} \cdot Number of Coins_{k}}{D_{d}}$$

$$I_{t}: SIX Crypto Market 10 Index Real-Time at time t$$

$$I_{t}: Current calculation time$$

$$m: Number of Crypto Assets in I_{t}: (m \le 10)$$

$$AR_{k,t}: SIX Crypto Average Rate Real-Time k at time t$$

$$Number of Coins_{k}:$$

$$D_{d}: Divisor on day d$$

6.3 SDX Crypto Indices

6.3.1 Objective of the Index

The objective of the SDX Crypto Indices is to measure the performance of currently two large and widely known Crypto Currency, namely Bitcoin (BTC) and Ether (ETH). To reduce the volatility of trading Prices and present a more stable Price point, the SDX BTC and SDX ETH Indices calculate the Volume Weighted Median Price over a one-hour time window. Trading Prices and volumes, which are used as input data for the Indices, are obtained from multiple Crypto Exchanges. The Index calculation takes place as described in section 6.3.2, every minute on each trading day of SIX from 6 am to 9:55 pm Zurich time. The SIX trading calendar can be found on the SIX website.

In addition to SDX BTC and SDX ETH which use a single Crypto Currency Pair as input data, a combined Index is also available. The combined Index (the "SDX Bi-Cap Index") is a market cap weighted Index, which uses the Volume Weighted Median Prices of SDX BTC and SDX ETH as input Prices.

6.3.2 Calculation Method

6.3.2.1 Volume Weighted Median Prices

The input Prices used for the Volume Weighted Median Prices are traded Prices of the underlying Crypto Currency Pair, i.e. Bitcoin, quoted against USD and retrieved from eligible Crypto Exchanges. The calculation is determined based on readily available data provided by the Crypto Exchanges. Contributed data or submissions are not considered.

The Volume Weighted Median Price ("VWMP") is calculated over the last 60 minutes prior to the current Index calculation time using abovementioned input Prices. The Volume Weighted Median Price is calculated in USD.

The calculation works as follows:

For all trading Prices (n) of a Crypto Currency (k) as reported on any eligible Crypto Exchange in time window (W), the set of all trade Prices (X_k) is sorted by Price in ascending order, i.e. {min(X_k)= $x_{1,k}$, $x_{2,k}$, ..., $x_{n,k}$ =max(X_k)}, along with the respective traded Value (v) of each trading Price { v_1 , v_2 , ..., v_n }.

The Volume Weighted Median Price is trade Price x_j, satisfying:

(1)
$$\sum_{i=1}^{j-1} v_i < \frac{1}{2} V \text{ and } \sum_{i=j+1}^n v_i \le \frac{1}{2} V$$

If no x_j can be found with (1) above, trade Price x_m , with m = {1,n} satisfying:

(2)
$$v_j > \frac{1}{2} V$$

$$\Rightarrow$$
 VWMP_{k,t} = x_k or x_m

6.3.2.2 SDX Bi-Cap Index

The input Prices used for the calculation of the SDX Bi-Cap are the Volume Weighted Median Prices as defined above.

Legend:

$I_{t} = \frac{\sum_{k=1}^{m} VWMP_{k,t} \cdot NumberOfCoins_{k}}{\sum_{k=1}^{m} VWMP_{k,t} \cdot NumberOfCoins_{k}}$	Legend:		
	I _t :	SDX Bi-Cap Index at time t	
	t:	Current calculation time, 1min intervals	
	m:	Number of Crypto Currencies in It: (m = 2)	
	k	Crypto Currency	
	VWMP _{k,t} :	Volume Weighted Median Price of Crypto Currency k at time t in USD	
	Number of Coins _k :	Units in circulation for Crypto Currency k	
	D _d :	Divisor on day d	

6.3.3 Index Composition

6.3.3.1 Eligibility Criteria for Exchanges and Crypto Currencies

Bitcoin and Ether have been determined as the Crypto Currencies for the SDX Bi-Cap Index.

A set of Exchanges, which cover the majority of trading globally for Bitcoin and Ether, are selected as sources for trading and volume data.

VWMPt:	Volume Weighted Median Price at time t
t:	Current calculation time, 1min intervals
n:	number of trades in time window W
k	Crypto Currency k (e.g. Bitcoin vs USD)
W:	time window of 1 hour
xi:	trade Price at position i
vi:	traded Value at position i in USD
V:	total volume in time window W $(\sum_{i=1}^n v_i)$

6.3.4 Weighting Scheme

The weight of each Crypto Currency in the SDX Bi-Cap Index is based on its market capitalization, i.e. the product of its Price and the Number of Coins.

6.3.5 Standardization/Index History

The SDX Bi-Cap Index was standardized on 01 August 2019 with a Base Value of 1000 points. Its divisor (see section 4) was established such that the result of dividing the total market capitalization by the divisor was an Index level of 1'000 points.

6.3.6 Final Settlement Value (FSV)

A Final Settlement Value (FSV) is disseminated for the SDX Bi-Cap Index, which can be used for the evaluation of financial products linked to this Index. The Index value calculated at 12:00 Zurich time in accordance with the formula in section 6.3.2.2, will be flagged as FSV for market participants to identify this value specifically.

7 Correction Policy

An Index-related correction is made if necessary data is or has not been available or it has been wrong.

7.1 Unavailable Data

If data to determine the Price or weight of an Index Component is not available to SIX due to trade suspensions or market distortions, the latest available data is used. Such cases may lead to a deviation from the general principles of the Indices defined in the respective rulebooks. These changes may be related to review schedules, ordinary reviews and component and weighting changes outside of ordinary Index reviews and are publicly announced with a notification period of at least 2 trading days.

7.2 Incorrect Data

Data errors caused by calculation errors or by incorrect inbound data.

Calculation errors which are detected within a trading day are immediately corrected. Intraday tick data is not corrected retrospectively. Calculation errors that are older than a trading day and incorrect inbound data are only corrected if technically possible and economically viable. If the correction leads to a significant difference in the Index levels, those can be corrected retrospectively.

8 Governance

The Indices are managed by the Index team of SIX. The team ensures that the Index rules are applied and the Indices fulfil the required quality standards. The Index team works against structured processes to ensure compliance with a regulatory framework. The main concepts of that framework are:

Review of Index Concepts

The validity of the Index concepts and the rules is reviewed on a regular basis and at least once a year. In exceptional cases, a broad market consultation may be conducted for this purpose. Changes to Index rules are made in accordance with the relevant governance processes.

The effective date of changes to Index rules will be aligned with the regular Index review where possible to avoid any exceptional impact on clients and other stakeholders. Significant changes to the Index rules should be publicly announced as standard three months prior to their implementation. SIX may decide to shorten the announcement period in some cases:

- In exceptional or urgent cases, or in situations that have no impact on clients or other stakeholders and where immediate communication is not possible. For example, when an investor can no longer replicate Index performance with their portfolio. In such cases, changes or additions to the rules must be announced on the same day the new Index rule or change is implemented.
- For immaterial changes to the Index rules, i.e. clarifications of the rules.
- To coordinate with the dates of the regular Index review and rebalancing of the Index.

Market Consultations

Where possible, SIX consults representatives of affected clients and other stakeholders on all material changes to Index rules and on the discontinuation of indices. In this context, a material change to the Index rules means a change that "significantly alters the procedures used to determine an Index" and thus materially affects the Index value compared to an unchanged scenario. At the beginning of a market consultation SIX will provide the following:

- Information about the key elements of the methodology that is considered to be affected by the proposed material change.
- An assessment whether the representativeness of the benchmark or family of benchmarks, and its appropriateness as a reference for financial Instruments and contracts, would be put at risk if the change were not made.
- The time frame of the consultation The timing and duration of the consultation period depends on the materiality of the proposed changes to the Index rules. By default, a market consultation for material changes lasts one month. A summary of the market consultation comments and SIX' response to those comments will be made available to clients and stakeholders after each consultation period, unless the originator of the comments has requested confidentiality.

Discontinuation of Indices

SIX will publicly announce a decision to discontinue an Index with reasonable advance notice. The period depends on the impact. By default, a period of one month is scheduled. SIX is not responsible for determining or offering an alternative Index when an Index is discontinued. If there are financial products on the Index of which SIX is aware, a market consultation will be conducted in advance and a transition period will be granted in the event of a final discontinuation. Otherwise, no market consultation will be carried out.

Controls and Rules for the Exercise of Expert Judgement

The rules for the individual Indices have been designed to eliminate discretionary or expert judgement in the Index calculation as far as possible. Due to unforeseen market events or unavailable data, the following situations may occur:

- Unexpected events, such as important and complex Forks.
- Technical reasons, for such as the inability of a Crypto Exchange to provide a close Price due to a computer outage.
- Where a rule allows for several interpretations ("unclear rule").
- The absence of a rule that could potentially lead to a reduction in the meaningfulness of an Index ("insufficient rule").
- Incorrect assessment of materiality in the case of changes to Index rules.

An escalation process has been implemented for such unexpected cases. As part of this process, SIX will evaluate and document the use of discretion. To the extent possible, the current rulebook will be updated to cover such unexpected cases with a new transparent rule.

In addition, any feedback from market participants on the use of discretion will generally be discussed with Index management.

Further documentation on regulation and processes can be found on the SIX website². SIX reserves the right to adjust the Index Composition, the weightings of the components or the announcement periods based on the basic principles mentioned in section 2.

² https://www.six-group.com/en/products-services/financial-information/indices/benchmark-regulation.html

9 External Communication

SIX uses the following tools to inform the market about Index changes. Index changes are changes in Index Compositions and component weightings as well as ordinary and extraordinary Index adjustments.

Reports

The Index team creates and maintains reports containing Index Compositions, component weightings, and other Index-relevant information. SIX publishes the reports on its website. The majority of the reports is only made available to license holders, however. Since the information of some reports is Index-specific, the number of reports which are relevant for an Index varies from Index to Index. Depending on the recency of their information, the reports are updated with different frequencies ranging from daily to annual.

Data Vendor Code Sheet

Information on the actual ticker symbols, Index standardizations, launch dates and calculation parameters of the Indices can be found in the Data Vendor Code Sheet which is published under <u>All Indices calculated by SIX</u> on the website of SIX.

Newsletter Email Service

SIX provides the Index Service Crypto to inform in depth on Crypto Indices including historical Index values, extraordinary market events, and information regarding the Index Composition. Interested parties may subscribe to the newsletter email service on the website³. SIX distributes all notifications regarding Indices over this channel. This may include but is not limited to:

- Updates to the periodic Index reviews
- Problems and error in the Index calculation
- The launch or discontinuation of Indices
- Market consultations
- Issuer surveys

Media Release

If an Index adjustment is of broad public interest, SIX can decide to publish a media release to inform the public about the Index adjustment. Furthermore, media releases can be made for marketing purposes which do not refer to Index adjustments.

³ <u>https://www.six-group.com/en/services/newsletter/the-swiss-stock-exchange/indices.html</u>

10 Trademark Protection, Use of Licensing

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⁴ <u>https://www.six-group.com/en/products-services/financial-information/indices/licensing.htm</u>

11 Contact

Any requests with respect to the Indices may be directed to one of the following addresses:

Index Business Support Index Sales, Licensing and Data T +41 58 399 26 00 Indexdata@six-group.com

Technical Support Index Operations T +41 58 399 22 29 Indexsupport@six-group.com

12 Appendix

12.1 Meme Coin Whitelist

Meme Coins eligible for Index inclusion:

Name Symbol From

<No Meme Coins currently eligible>

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