

Index guidelines relating to the

# Risk-Adjusted Bitcoin & USD Overnight Interest Index

ISIN: DE000A3E15K3

("Index Guidelines")

Version 1.0 dated 17.11.2023



### **Important Information**

The general principles of the Risk-Adjusted Bitcoin & USD Overnight Interest Index (the "**Index**") as of 17.11.2023 are set out below.

These Index Guidelines contain the underlying principles and regulations regarding the structure and the operations of the Index. The Index is the sole property of the Index Sponsor. LIXX GmbH, Fürstenwall 172a, 40217 Düsseldorf, Germany acting as Index Administrator maintains and publishes the Index and strives to the best of its ability to ensure the correctness of its mechanism and calculation. The Index Administrator is not obliged – irrespective of possible obligations to issuers, licensees and other users – to advise third parties, including investors and/or financial intermediaries, of any errors in the Index. This document is to be used as a guideline regarding the composition, calculation and management of the Index.

It should be noted that the general principles of the Index may be updated or amended from time to time. In managing the Index, the Index Administrator will employ the methodology described herein and its application of such methodology shall be conclusive and binding. No assurance can be given that fiscal, market, regulatory, juridical, financial or other circumstances will not arise that would, in the view of the Index Administrator, necessitate or make desirable a modification of or change to such methodology. The Index Administrator shall be entitled to make any such modification or change any of the provisions of the Index as set out in these Index Guidelines as it deems fit. The Index Administrator may also make modifications to the terms of the Index in any manner that it may deem necessary or desirable, including (but not limited to) to correct any manifest or proven error to cure, correct or supplement any ambiguity or defective provision contained in these Index Guidelines. Any such modification or change shall take effect upon publication of the relevant Index Guidelines.

This document is communicated by the Index Administrator. All information provided herein is for information purposes only and no warranty is made as to its fitness for purpose, satisfactory quality or otherwise. Every effort has been made to ensure that all information given is accurate, but no responsibility or liability (including in negligence) can be accepted by the Index Administrator for errors or omissions or for any losses arising from the use of this information. The information presented herein has been prepared based on the publicly available information, internally developed data or other third-party sources believed to be reliable. All opinions and views constitute judgments as of the date of the writing and are subject to change at any time without notice. Neither the information contained in these Index Guidelines nor the calculation and publication of the Index by the Index Administrator constitutes an invitation to make an investment in a product based upon the Index. Information, recommendations, or opinions expressed herein shall not constitute an offer for purchase of such product nor shall it purport any assurance regarding a purchase of such a product.

The Index is designed as an "index" pursuant to the Benchmarks Regulation.



# Risk-Adjusted Bitcoin & USD Overnight Interest Index

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#### 1 DEFINITIONS

Allocation Mechanism Has the meaning given to such term in **Annex 3**.

Annex Means an annex to these Index Guidelines, each of which form an

integral part of these Index Guidelines.

Benchmarks Regulation Means Regulation (EU) 2016/2011 of the European Parliament and

the Council of 8 June 2016 as amended.

Business Day Means each day Monday to Friday which is not a public holiday in a

Business Day Centre.

Business Day Centres Means Düsseldorf and Zurich.

Change in Law Any change in any national or international laws, regulations,

directives, decisions by courts of last resort or administration practice applicable to any Index Component and affecting any Index Component to the economic detriment of the Index Administrator

or any holder of any Index Component.

Index Risk-Adjusted Bitcoin & USD Overnight Interest Index (ISIN

DE000A3E15K3).

Index Administrator LIXX GmbH, a limited liability company (Gesellschaft mit

beschränkter Haftung) under the laws of the Federal Republic of Germany, registered with the commercial register (Handelsregister) of the local court (Amtsgericht) of Düsseldorf under HRB 81816, with the principal place of business at Fürstenwall 172A, 40217 Düsseldorf, Federal Republic of Germany.

Index Component Any constituent of the Index selected from the Index Universe.

Index Component Selection Has the meaning given to such term in **Annex 2**.

Criteria

Index Currency USD

Index Level Has the meaning given to such term in Section 4.1 (*Index Formula*).

Index Objective Has the meaning given to such term in Section 2.1 (Summary of

Index Specifications).



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Index Sponsor Leonteq Securities AG, a public limited liability company under the

laws of Switzerland and registered under number CH-020.3.031.478-9 having its statutory seat in Zurich and principal place of business at 39, Europaallee, 8004, Zurich, Switzerland.

Index Start Date 17.11.2023

Index Universe Instruments, which may be selected as Index Components, as listed

in Annex 1.

Index Valuation Date Means each Business Day. If a scheduled Index Valuation Date is

not a Business Day, the next day that is a Business Day shall be the

relevant Index Valuation Date.

Initial Index Level 100.00

LIXX Correction Policy Means the correction policy published by the Index Administrator

on the Website.

Official Valuation The official valuation is based on publicly available data that has

been made available by established information services or exchanges. Such data includes values taken as per 2:00 pm Duesseldorf time for each Index Component that is categorized as crypto asset and daily closing (end of day) values of each other Index Component, as they are available on the relevant Index Valuation Date. If no data is available on the relevant valuation date, the most

recent value available will be considered.

Price Return Index Index calculated based on price movements of the Index

Components

Rebalancing Date Has the meaning given to such term in **Annex 3**.

Regulatory Event Any public or private statement or action by, or response of, any

competent authority or any official or representative of any competent authority acting in an official capacity affecting any Index Component to the economic detriment of the Index

Administrator or any holder of any Index Component.

Section Means a section of these Index Guidelines.



## Risk-Adjusted Bitcoin & USD Overnight Interest Index

Significant Change Has the meaning given to such term in Section 4.10 (Consulting

Procedures and Significant Change).

Tax Event Means any change in the tax treatment of a holder of Index

Components which is based on either a change in legislation or a

change in tax administration practice.

USD Cash Has the meaning given to such term in **Annex 2**.

Website Means www.lixxinnovation.com.



#### 2 INDEX DESCRIPTION

### 2.1 Summary of Index Specifications

### **Objective**

The objective of the Index is to reflect the performance an investor can achieve by investing in a dynamic portfolio of Bitcoin and USD Cash.

The weight of each Index Component is determined by using a mechanism to control the maximum drawdown of the Index (the "**Index Objective**").

### Administration of the Index and Regulatory Status

The Index is calculated, maintained, rebalanced and published by the Index Administrator and sponsored by the Index Sponsor.

As at the date of these Index Guidelines the Index is considered a "non-significant benchmark" within the meaning of Article 3 para 1 (27) of the Benchmarks Regulation. The Index is administrated in accordance with the applicable provisions of the Benchmarks Regulation and its delegated acts. The Index Administrator may, at its own discretion, choose not to apply some or all non-mandatory, waivable obligations in accordance with Article 26 of the Benchmarks Regulation.

#### **Index Universe**

The Index Universe is set out in **Annex 1**.

#### **Selection of Index Components**

The selection of the initial components is defined at the launch of the Index. The Index Components must meet the Index Component Selection Criteria set out in <u>Annex 2</u> at the time of inclusion. The initial index allocation is set out in <u>Annex 4</u>.

### **Changes to Index Components**

The Index Component's weightings are subject to change. The Index Administrator will adjust the Index allocation by implementing the Allocation Mechanism described in **Annex 3**.



### **Index Methodology**

The methodology of the Index is set out in Section 3 (*Index Methodology*).

### **Technical Specifications**

The Index is calculated daily in USD. The Index is a Price Return Index.

### **Data Provider**

Relevant prices used to allocate the Index Components are based on the Official Valuation, which is sourced from data that is readily available to the Index Administrator. For the avoidance of doubt, provisioning of such data does not constitute contribution of input data under the Benchmarks Regulation.

#### 2.2 Name and ISIN

The name of the Index is Risk-Adjusted Bitcoin & USD Overnight Interest Index. The Index is distributed under ISIN DE000A3E15K3 and Bloomberg Ticker LIXX80II.

#### 2.3 Index Start Date; Initial Index Level

The calculation of the Index commences on 17.11.2023 ("Index Start Date") at an initial index level of 100.00 ("Initial Index Level").

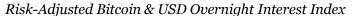
### 2.4 Distribution

The Index Level is published by the Index Administrator under a sub-page on the Website as of each Index Valuation Date, no later than ten (10) Business Days following the respective Index Valuation Date.

#### 2.5 Prices and Calculation Frequency

The Index is calculated daily on each Index Valuation Date.

The Index calculation is based on the Official Valuation of the respective Index Components on the relevant Index Valuation Date.





The Index Administrator will take appropriate steps to avoid a disruption to the process of the provision of the Index. However, if relevant data cannot be obtained, the Index Administrator will not publish the Index.

Deficient calculations will be managed in accordance with the LIXX Correction Policy.

### 2.6 Publication

Specifications and information relevant for calculating the Index will be made available on the Website and relevant sub-pages.

### 2.7 Index Administrator

The Index is calculated by the Index Administrator. Adjustments to the Index Level are determined by the Index Administrator.

In performing its duties, the Index Administrator follows the business principles published on the Website and the applicable provisions of the Benchmarks Regulation and its delegated acts.

### 2.8 Historical Data

Historical data will be recorded in accordance with Article 8 of the Benchmarks Regulation, if and as applicable. This means that in such cases all input data and the methodology is recorded for a minimum of five (5) years.

### 2.9 Licensing

Licenses to use the Index as a benchmark for financial instruments within the meaning of the Benchmarks Regulation are issued by the Index Administrator or the Index Sponsor.



#### 3 INDEX METHODOLOGY

The Index Components of the Index are static, however Index Components may be replaced at the Index Administrator's discretion in certain circumstances, as described in Section 3.4 (*Extraordinary Changes to Index Components*) and in Section 4.5 (Adjustments).

Index Components must, at the time of inclusion, meet certain selection criteria, as described in Annex 2. In case of any replacement of an Index Component, the Index Administrator will publish information about a change pursuant to Section 2.6 (Publication).

The Index Level will be determined based on the Official Valuation.

### 3.1 Index Universe

The instruments which are selected for inclusion in the Index as Index Components are set out in **Annex 1**.

### 3.2 Selection of Index Components

Subject to Section 3.4 (*Extraordinary Changes to Index Components*) and in Section 4.5 (Adjustments), Index Components must meet the Index Component Selection Criteria set out in **Annex 2** at the time of inclusion. The initial index allocation is set out in **Annex 4**.

### 3.3 Allocation of Index Components

The weighting of Index Components is executed by the Index Administrator by applying the Allocation Mechanism set out in **Annex 3** to these Index Guidelines.

## 3.4 Extraordinary Changes to Index Components

The Index Administrator may, at its reasonable discretion, remove an Index Component from the Index if on any Index Valuation Date *inter alia*:

- (i) Such Index Component ceases to meet the Index Component Selection Criteria;
- (ii) such Index Component ceases to exist or is being terminated;
- (iii) purchasing, holding or selling of such Index Component becomes unlawful or economically unreasonable for a holder of such Index Component in Switzerland or the European Economic Area;
- (iv) the Index Administrator deems such removal necessary to ensure that the Index continues to meet the Index Objective and composition restrictions;
- (v) a Change in Law, Tax Event or Regulatory Event occurs.



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After removal of an Index Component the remaining Index Components' allocation may be adjusted accordingly and a replacement component that meets the Index Component Selection Criteria may be added to the Index.

An instrument that satisfies the Index Component Selection Criteria may be added to the Index to ensure that the Index continues to meet the Index Objective and composition restrictions. After inclusion of the new instrument, the other Index Components' allocation may be adjusted accordingly.



#### 4 CALCULATION OF THE INDEX

### 4.1 Index Formula

On each Index Valuation Date, the Index Administrator calculates the level of the Index (the "**Index Level**"). This calculation is based on the Official Valuation.

The Index Administrator will use the following formula to calculate the Index Level:

$$Index_t = \sum_{i=1}^{N} (W_{t,i} x P_{t,i}) - A_t$$

Whereas:

 $Index_t$  Means the Index Level on Index Valuation Date t.

- $W_{ii}$  Means the number of units of Index Component i on Index Valuation Date t.
- $P_{ti}$  Means the Official Valuation of Index Component i on Index Valuation Date t, converted to USD where necessary.
- At Means the adjustment factor, which is determined at the reasonable discretion of the Index Administrator on Index Valuation Date t with reference to adjustments carried out pursuant to Sections 4.4 (Other Changes) and 4.5 (Adjustments).
- N Means the total number of Index Components.
- i Means an indicator for an individual Index Component, where i = 1 represents Bitcoin and i = 2 represents an ETF.
- t Means an indicator for the relevant Index Valuation Date where t = 0 represents the Index Start

  Date and for each subsequent Index Valuation Date t, t is incremented by 1.0.

### 4.2 Transaction Fee

A transaction fee of 0.3% is applied to an amount in the Index Currency which, converted, corresponds to the changed weighting of an Index Component in the Index resulting from any adjustment of the Index. The transaction fee reduces the Index Level as it results in a lower number of units of each Index Component.

### 4.3 Accuracy



The value of the Index will be rounded to two (2) decimal places (with halves being rounded up). Calculations on units are rounded to eight (8) decimals (with halves being rounded up).

### 4.4 Other Changes

The Index Administrator may at its reasonable discretion amend these Index Guidelines to (i) ensure achievement of the Index Objective or (ii) to address any errors, omission or ambiguities. Such amendments may include changes to the Index Component Selection Criteria or the rules with respect to the composition, calculation and weighting of the Index.

### 4.5 Adjustments

In case of systematic changes affecting the price of an Index Component or the number of units of an Index Component (e.g. caused by forks), the Index Administrator will assess whether such adjustment has a dilutive or any other effect on the price of the Index Component. In such case, the Index Administrator will make required adjustments and determine the date on which these adjustments become effective. Amongst other things the Index Administrator can consider adjustments executed by an exchange as a result of the corporate action concerning options and futures.

#### 4.6 Rebalancing

The Index Administrator will rebalance the Index Components' weightings as described in **Annex 3** to these Index Guidelines.

## 4.7 Data Provider

Input data will be sourced from publicly available sources (readily available data) to maintain or calculate the Index. For the avoidance of doubt, provisioning of such data does not constitute contribution of input data under the Benchmarks Regulation.

### 4.8 Index Continuity and Market Disruption

In case of missing, insufficient, inaccurate or unreliable input data or non-compliance with the standards as set out below, for any of the required data to calculate the Index, the Index Administrator may not calculate and publish the Index. The decision will be taken at the Index Administrator's sole discretion.

In case the minimum requirements and standards set out below are not fulfilled for a considerable time, the Index Administrator, to protect users of the Index, will publish such circumstance either by



amending the Index Guidelines, or by notice on the Website. Where appropriate, the Index Administrator will consult experts to make the decision.

The minimum requirements for the quantity of input data are:

- A price for each Index Component must be available;
- a weight of each Index Component must be available or calculatable.

The minimum standards for the quality of input data are:

- Data must be reliable and consistent;
- data must be robust:
- data must be verifiable.

## 4.9 Internal Review and Approval of Methodology

After the preparation of the index related documentation, a review round with regards to whether the requirements of the Benchmarks Regulation are reflected and whether there is an operational feasibility for implementation takes place. Thereafter, a revision and further coordination with relevant parties takes place, including a dedicated checklist maintained by the Index Administrator to ensure compliance with the Benchmarks Regulation. Such a checklist includes, among other things, documentation requirements of the Benchmarks Regulation. After the relevant steps have been successfully completed, the management of the Index Administrator has discretion to approve launching an index. The methodology is reviewed annually.

#### 4.10 Consulting Procedures and Significant Change

In the event of a proposed Significant Change in the Index methodology, it is the responsibility of a relevant party to contact the Index Administrator and notify the relevant request. Such notification must in any case be made in writing or by email. The Index Administrator will subsequently review the case regarding the reasons given.

For the purposes of this Section 4.9 "**Significant Change**" means, in each case determined in the Index Administrator's reasonable discretion taking into account the Index Sponsor's interests and Index users at all times:

(i) Any change which causes a change in the Index Level of more than 3% compared to the Index Level prevailing in the absence of such change on the last Index Valuation Date prior to such change; and



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(ii) any methodological adjustment that leads to significant changes of the Index Levels in the longer term.

In case of a Significant Change, the Index Administrator will provide updated Index Guidelines on its website. In addition, any licensees will be informed by the Index Administrator about any Significant Change.



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# 5 CHANGE HISTORY

17.11.2023 – 1.0. – Initial version



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#### **6 CONTACT DATA**

# **Information regarding the Index**

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Risk-Adjusted Bitcoin & USD Overnight Interest Index

## **ANNEX 1: INDEX UNIVERSE**

Instruments		
Bitcoin (incl. in the form of spot, ETF and futures)		
ETFs		





#### **ANNEX 2: INDEX COMPONENT SELECTION CRITERIA**

Each instrument selected from the Index Universe must fulfil the following criteria to be eligible for inclusion in the Index ("Index Component Selection Criteria"). An instrument is eligible if:

- a) it is permitted as an underlying instrument for derivatives in accordance with the SIX Exchange Regulation, Circular No. 3 Practice for the Listing of Derivatives (CIR3), or a successor thereof, and it has a price that is set regularly and publicly accessible; or
- b) it is a money market ETF representing the USD overnight interest rate ("USD Cash").

Index Component 1 is Bitcoin. Index Component 2 is USD Cash. There are two (2) Index Components at the same time. The Index Component Selection Criteria are required to be fulfilled at the time of inclusion of the relevant instrument as Index Component in the Index. However, fulfilment of the Index Component Selection Criteria will not be monitored on an ongoing basis following such inclusion.



### **ANNEX 3: ALLOCATION MECHANISM**

### 1 General Concept

The Index represents a rule-based allocation strategy replicating investments in Bitcoin (Index Component 1) and USD Cash (Index Component 2) where the Index Administrator does not exercise discretion regarding the described Allocation Mechanism. In order to control the maximum drawdown, the following concept applies:

- maintaining a protection floor ("**Protection Floor**")
- allocation of the difference between the current Index Level and the Protection Floor to Bitcoin
- daily monitoring and rebalancing when applicable

### 2 Rebalancing Date

The Index may be rebalanced daily (for t > 0) to achieve the Index Objective. The rebalancing applies when:

Abs (Protection Floor<sub>t</sub> –
$$W_{2,t-1}$$
  $x$   $P_{2,t-1}$ ) > Buffer  $x$  Index<sub>t-1</sub>

and

 $Protection\ Floor_t = (Lock-in + Buffer) \times Max.\ Index\ Level_t$ 

Where

Buffer means 1.0%

Lock-in means 80.0%

Max. Index Level<sub>t</sub> means the maximum Index Level over a period starting 1 year prior to Index

Valuation Date<sub>t</sub> and ending on Index Valuation Date<sub>t-1</sub>. Any Index Levels not available during this period (e.g. due to lack of history) are ignored. Max. Index

Level<sub>1</sub> is set to 100.00.

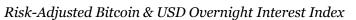
In this case, an Index Valuation Date<sub>t</sub> is a "**Rebalancing Date**".

#### 3 Calculation of $W_{1,t}$

If Index Valuation Date<sub>t</sub> is a Rebalancing Date, then W<sub>1,t</sub> will be calculated as follows:

Interim Index<sub>t</sub> = 
$$W_{1,t-1} \times P_{1,t} + W_{2,t-1} \times P_{2,t}$$
  
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Theo. Trading Capital<sub>t</sub> = Interim Index<sub>t</sub> - Protection Floor<sub>t</sub>

Current Trading Capital<sub>t</sub> =  $W_{1,t-1} \times P_{1,t}$ Difference<sub>t</sub> = Theo. Trading Capital<sub>t</sub> - Current Trading Capital<sub>t</sub>  $W_{1,t} = Max(o, W_{1,t-1} + Difference_t / Execution Price_{1,t})$ 

Otherwise:

$$W_{1,t} = W_{1,t-1}$$

Where

Execution Price<sub>1,t</sub> means P<sub>1,t</sub> impacted by a transaction fee of 0.3%

### 4 Calculation of W<sub>2,t</sub>

If Index Valuation Date<sub>t</sub> is a Rebalancing Date, then W<sub>2,t</sub> will be calculated as follows:

$$W_{2,t} = W_{2,t-1} - (W_{1,t} - W_{1,t-1}) \times Execution Price_{1,t}/P_{2,t}$$

Otherwise:

$$W_{2,t} = W_{2,t-1}$$



# **ANNEX 4: INITIAL INDEX ALLOCATION**

The initial weight allocation for the Index Components is set out below.

Index Component Name	Weight
Bitcoin (spot)	19.00%
Xtrackers II Overnight Rate Swap ETF 1C	81.00%