



INDEX GUIDE

MENAI-MarketVector™ DIVERSIFIED DIGITAL ASSET INDEX

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INTRODUCTION

1 Introduction

In accordance with Art. 13 No. 1 (a) of Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 (the "Benchmark Regulation"), this document provides the rules for establishing, calculating and maintaining the Menai-MarketVector™ Diversified Digital Asset Index ("MVMEN").

1.1 Objective of Index

The index is passive, capitalization weighted, capped; providing a diversified, long-term and non-speculative investment approach based on a portfolio of digital assets derived from the three different use-cases of digital assets.

1.2 About Menai Financial Group

Menai Financial Group (the "Index Owner") is building the future of finance, bridging emerging digital markets with established markets and driving more inclusion in the financial industry. We are doing so by developing the fundamental components – essential markets and investment infrastructure – needed to unlock the full potential of digital assets as an asset class. Our decades of experience in established and digital finance uniquely position us to do so and will propel the digital assets industry from adolescence to adulthood. We will help to make digital assets more credible, accessible and efficient, and ultimately open up access to billions of people left behind by the traditional global financial system.

Menai Finance, a wholly owned subsidiary of Menai Financial Group, provides institutional-grade investment products that allow individual and institutional investors a secure and convenient way to invest in digital assets. These products are constructed to provide sophisticated investors with holistic exposure to the upside of digital assets investments, as well as a way to diversify idiosyncratic risks to optimize for risk-adjusted returns through digital assets.

1.3 About MarketVector Indexes GmbH

MarketVector Indexes GmbH (the "Index Administrator") develops, monitors and markets the MarketVector™ Indexes, a focused selection of pure-play and investable indexes designed to underlie financial products. MarketVector™ is a registered trademark of Van Eck Associates Corporation and therefore protected globally against unlawful usage. MarketVector Indexes has selected an index calculation agent to calculate the index.

1.4 Approval of Index Methodologies

Menai Financial Group has established the index and its individual methodology covered in this Index Guide. A detailed written "Procedure for Index Development" describes the steps and approvals required to develop, document and approve an index and its methodology. The intention of the Procedure for Index Development is to ensure that the methodology of an index meets the requirements of Art. 12 of the Benchmark Regulation and is approved and implemented according to a robust and reliable process.

The methodology for the index covered in this Index Guide has been analysed by the Index Administrator's Index Operations department in order to ensure that it is robust and reliable, has clear rules on use of discretion, allows sustainable validation (based on reasonable back testing) and is traceable and verifiable. Furthermore, the size, liquidity and transparency of the underlying market for the methodology have been tested and particular circumstances for each relevant market have been taken into account.





INTRODUCTION

The index methodology and the related detailed analysis were presented by the Index Operations Department to the Independent Oversight Function ("IOF") for its approval. Based on the aforementioned approval process and its documentation, the index methodology was presented to the Management Board (Geschäftsführer) of the Index Administrator for final approval.

1.5 Review of this Index Guide

According to Art. 13 No. 1 (b) of the Benchmark Regulation, the Index Administrator reviews this Index Guide on an annual basis and immediately in case of special circumstances that require a review. The review takes place in meetings attended by the Independent Oversight Function and the Management Board of the Index Administrator. If changes to this Index Guide are considered necessary, the process described in Section 4.7 applies.





2 General definitions

2 General Definitions

2.1 Index Dissemination and Identifiers

The index is calculated with the constituent prices converted to USD, on a daily basis between 00:00 and 24:00 (CET/CEST). Dissemination is in USD. Real-time index values are calculated with the latest available prices each 15 seconds. The closing value is calculated at 17:00:00 CET/CEST with fixed 17:00 CET/CEST exchange rates.

The Menai-MarketVector™ Diversified Digital Asset Index has the following identifiers:

		0			
Index Type	ISIN	SEDOL	WKN	Bloomberg	Reuters
Price Return Index	DE000SL0CAA0	BN6HR71	SL0CAA	MVMEN	.MVMEN

The index was launched on 31 December 2020 with a base index value of 100.00 as of 30 September 2017.

2.2 Review Schedule

The index is rebalanced semi-annually in March and September.

The reviews for the index are based on the opening data (adjusted for reviewed amount outstanding) on the fourth but last business day in March and September. If a digital asset does not trade on a business day, then the last available price for this digital asset will be used.

A "business day" for the purposes of the review means any day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments in Frankfurt.

Adjustments to constituents will be announced on the fourth from the last business day in March and September at 23:00 CET/CEST.

The index is rebalanced at 17:00:00 CET/CEST of the last business day of March and September.

A "business day" for the purposes of the rebalance means any day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments in New York.

2.3 Pricing Source

For each component price, the Price Index by CCData is used. The Price Index is a weighted average of the latest available trading price at each exchange. Exchanges can be added/removed by decision of CCData.

For clarification, 'Price Index' means CCIX by CCData as published on the CCData website (https://ccdata.io) with the following deviations:

- Exchanges may be excluded if they are not licensed to be added to an index.
- Exchanges are not immediately added/removed, but only on a monthly basis or if required following quality reviews from CCData.
- Values are not backadjusted.





3 SEMI-ANNUAL REVIEW

3 Semi-Annual Review

3.1 Index Universe

The index universe includes all digital assets traded on the exchanges covered by the CCIX pricing provided by CC Data Ltd. ("CCData"). Country specific events and local regulatory activity do not influence the eligibility of these digital assets.

3.2 Eligible Index Universe

All qualified digital assets need to fulfill the following conditions:

- Availability of custodians approved by the Index Owner,
- Must not carry short term security risks (e.g., 51% attacks),
- · Must not be stable coins, pegged assets or privacy coins,
- Based on the closing data as of twelve business days before the last business day in March and September:
 - Must be actively trading on at least 3 of a list of pre-determined high-quality exchanges (rating A or higher on CCData's Exchange Benchmark),
 - Must have a minimum trading volume of average 2 million USD per day against USD over the past 30 trading days (must have 30 trading days) based on the list of pre-determined high-quality exchanges (rating A or higher on CCData's Exchange Benchmark).
- Must fulfill at least one of the following use-cases:
 - Storage of Value Digital Gold
 - Transfer of Value Payments
 - Processing of Value Smart Contracts

The following criteria are used to assess whether a digital asset qualifies to serve the respective use-case (a digital asset can be in multiple use-cases):

- Storage of Value: the digital asset must be free-floating with a fixed supply.
- Transfer of Value: the digital asset's blockchain must have an average transaction time of less than 20 seconds.
- Processing of Value: the digital asset must have its own native smart contracts platform or must be built on a smart contracts platform.

3.3 Index Selection

The review procedure is as follows:

- 1. All eligible digital assets are grouped into three buckets based on their use-cases. A digital asset can belong to multiple buckets if it fulfills multiple use-cases.
- 2. For each use-case bucket, the eligible digital assets are sorted in terms of the market capitalization in descending order.
- 3. Within each use-case bucket, top 5 digital assets that fulfill the universe criteria qualify for the index.

A digital asset can qualify in multiple use-case buckets.





3.4 Weighting Scheme

The index uses a modified market cap weighting methodology based on the three use-case buckets. Each bucket targets a weight of one third of the index. The weight of any single index constituent is capped at 30%. If any index constituent exceeds the maximum weight, then the weight will be reduced to the maximum weight and the excess weight shall be redistributed proportionally across all other index constituents. This process is repeated until no digital asset has a weight exceeding the maximum weight.

The weighting methodology procedure is as follows:

- For each use-case bucket, the market capitalization weight of each index constituent within the
 respective use-case bucket is calculated. An index constituent might belong to more than one usecase bucket. In such a case, the index constituent weight within each use-case bucket is separately
 calculated.
 - For an index constituent, all use-cases for which it qualifies to serve (not only the use-case where it qualifies for the index but all the other use-cases as well) are considered in calculating the constituent weight. In other words, if, for example, a digital asset has three use-cases, but it qualifies for the index through only one use-case, its weight from the other two use-cases will still be considered in calculating the index constituent weight.
- 2. The weight for each index constituent is determined by adding up the weights across all three usecase buckets and dividing the sum by three.
- 3. If an index constituent exceeds the maximum weight of 30%, the weight will be reduced to the maximum weight and the excess weight shall be redistributed pro-rata to the market capitalization across all other index constituents. This process is repeated until no index constituent has a weight exceeding the maximum weight.

For the backtest of the index, CCData's Exchange Benchmark July 2020 was used.

4 Ongoing Maintenance

4.1 Changes in Amount Outstanding

Changes in the amount outstanding will not be adjusted between the semi-annual reviews, but with the next semi-annual review.

4.2 Changes due to Forks

A hard fork occurs when a blockchain protocol is radically changed, such that it becomes incompatible with older versions. In effect, participants taking part in transactions on the old blockchain must upgrade to the new one in order to continue validating transactions. However, participants that do not upgrade may continue to support and validate transactions on the older blockchain protocol separately.

The result of this is that a blockchain splits into two - hence the name 'hard fork'. If there are nodes permanently supporting the new chain, then the two chains will co-exist.

Users that once held digital assets on an older blockchain before the protocol change at a pre-specified blockchain length will now also hold an amount of new digital assets on the altered blockchain. This new asset has essentially been derived from an older token as well as its associated blockchain's transaction history.





4.2.1 No Addition of Forks

In case of a hard fork, the forked digital asset is not added to the index.

4.3 Airdrops

Because most airdrops are of de minimis value and are illiquid or unlisted, the MVMEN does not incorporate their values into the calculation of the index. Claiming airdrops sometimes requires agency on the behalf of an investor and may pose a security risk. Issuers tracking this index may claim potentially valuable airdrops in pursuit of excess returns.

The same treatment applies to soft forks if the process results in a division or split into multiple non-fungible assets.

4.4 Changes to Pricing (CCIX)

In case an exchange is added to CCIX or removed from it, the index divisor will not be adjusted.

4.5 Index Corrections

- Index corrections distinguish between calculation errors and incorrect input data.
- Calculation errors detected within a trading day are corrected immediately. Intraday tick data are not corrected retrospectively.
- Calculation errors that are older or based on erroneous input data are corrected if technically
 possible and economically viable. If significant differences exist, index values can also be corrected
 retrospectively.

4.6 Review of Index Concept

Due to a very dynamic market of digital assets and tokens the index methodology, parameters and thresholds will be reviewed at least once a year. Market participants feedback will be considered in the process whether or not to make amendments to the methodology and the data sourcing process. Any changes will be communicated by Menai Financial Group and MarketVector Indexes with a 30-day lead time to enable customers to adjust their processes.

4.7 Changes to the Index Guide

Any changes to the Index Guide will be reviewed and approved by the Index Owner and MarketVector Indexes' Legal and Compliance Department. Legal and Compliance may also request a conclusive description and further information on any change and may consult the operations department on such changes. The key elements to be analysed in this phase of the change process are robustness, transparency, reliability and integrity. The result of the review will be communicated to the operations department. The email will be archived by the operations department.

In case of changes that might immediately change the composition of an index or must be considered material for any other reason also need to be approved by the Independent Oversight Function prior to their publication and implementation.





In case of material changes an advance notice will be published and provided to users. MarketVector Indexes will generally disseminate a notification related to an Index Guide change 30 days prior to the change. A shorter period of time may be applied at MarketVector Indexes' discretion if the relevant index has not been licensed for a financial product to a third party. The notice will describe a clear time frame that gives the opportunity to analyse and comment upon the impact of such proposed material change. Any material comments received in relation to the Index Guide change and MarketVector Indexes' response to those comments will be made publicly accessible after any consultation, except where confidentiality has been requested by the originator of the comments.

4.8 Discretion regarding the Use of Input Data and Extraordinary Events

Pursuant to Art. 12 No.1. (b), MarketVector Indexes has established the following rules identifying how and when discretion may be exercised in the administration of an index.

In case input data are or appear to be qualitatively inferior or different sources provide different data, an extraordinary event, or a situation is not covered by the index rules, MarketVector Indexes may use or change data/index composition at its own discretion according to the following discretion policy after a plausibility check. Regarding input data, this may include:

- Liquidity and size data,
- · Event information,
- Other secondary data.

Regarding extraordinary events, this may include:

- Trading stops,
- Regulatory actions,
- Hacks,
- Detection of fraud,
- Changes in custodian coverage,
- Etc.

Any changes must subject to reasonable discretion. The decision on any change must be required, appropriate, commensurable and in line with the respective index scope and objective and must reasonably consider in a balance weight the interest of Users, investors in related products and the integrity of the market.

Index operations ensures consistency in the use of discretion in its judgement and decision. Employees involved in the operations team must have shown the respective experience and skills. Significant decisions are subject to sign-off by a supervisor. In case of material changes to data the relevant situation will be analyzed in detail, described and presented to the IOF and discussed and reviewed with the IOF.

The broad range of possible data quality problems does not allow to define specific steps for each possible instance. MarketVector Indexes will always weight the different interest of the index users, the integrity of the market and other involved parties and determine the least disadvantageous measure that equally considers the relevant interests best.





In order to avoid individual decisions in similar cases for the future an update of the index rules can be taken into consideration if applicable. Regarding the use of data, other possible mitigation measures are the change of input data sources or providers and/or own data research where possible and reasonable.

Records are kept about material judgement or discretion by MarketVector Indexes and will include the reasoning for said judgement or discretion.

4.9 Input Data and Contributor Selection

According to the input data requirements under Art. 11 of the Benchmark Regulation the, following shall apply with regard to the input data used for the management and provision of an index and the relevant input data providers ("Contributors"):

- the input data shall be sufficient to represent accurately and reliably the market or economic reality that the benchmark is intended to measure;
- the input data shall be transaction data, if available and appropriate. If transaction data is not sufficient or is not appropriate to represent accurately and reliably the market or economic reality that the index is intended to measure, input data which is not transaction data may be used, including estimated prices, quotes and committed quotes, or other values;
- the input data shall be verifiable;
- clear guidelines regarding the types of input data, the priority of use of the different types of input data and the exercise of expert judgement, to ensure compliance with the Index Guide and index methodology and the aforementioned requirements are defined in the Code of Conduct for Contributors; and
- where an index is based on input data from Contributors, MarketVector Indexes will obtain, where
 appropriate, the input data from a reliable and representative panel or sample of Contributors so as
 to ensure that the resulting index is reliable and representative of the market or economic reality that
 the index is intended to measure.

In order to control the quality of Contributors, MarketVector Indexes will conduct the following controls:

- Evaluate market share, reputation, quality and cost of possible input data sources and providers before selecting them on the basis of the gathered information and data;
- Compare the input data of one Contributor with the input data from one or more other Contributors in order to ensure the integrity and accuracy of the input data and in case of bad quality replace a Contributor with another Contributor.

MarketVector Indexes will not use input data from a Contributor if it has any indication that the Contributor does not adhere to its Code of Conduct for Contributors and in such a case shall obtain representative publicly available data.





5 CALCULATION

5 Calculation

5.1 Index Formula

The index is calculated using the Laspeyres' formula:

$$Index\ Value = \frac{\sum_{i=1}^{n} p_i * q_i * cf_i * fx_i}{D} = \frac{M}{D}.$$

Where (for all tokens (i) in the index):

 p_i = price,

 q_i = amount outstanding,

 cf_i = weighting cap/floor factor (if applicable, otherwise set to 1),

 fx_i = exchange rate (index currency to USD),

M = market capitalization of the index,

D = divisor.

5.2 Input Data

The following rounding procedures are used for the index calculation:

- Rounding to 2 decimal places:
 - index values,
- Rounding to 6 decimal places:
 - divisors (D),
- Rounding to 18 decimal places:
 - prices (p_i) ,
 - exchange rates (fx_i) ,
 - weighting cap/floor factors (cf_i) .

5.3 Divisor Adjustments

Index maintenance - reflecting changes in amount outstanding, events, addition or deletion of tokens to the index - should not change the level of the index. This is accomplished with an adjustment to the divisor. Any change to the tokens in the index that alters the total market value of the index while holding token prices constant will require a divisor adjustment.

$$Divisor_{new} = Divisor_{old} * \frac{\sum_{i=1}^{n} p_i * q_i * cf_i * fx_i \pm \Delta MC}{\sum_{i=1}^{n} p_i * q_i * cf_i * fx_i}.$$

 ΔMC = Difference between closing and adjusted closing market capitalization of the index.





5 CALCULATION

5.4 Data Correction and Disruptions

MarketVector Indexes will usually receive information about errors or disruption from calculation agent, Index Owner, client, internal systems (IT) or by monitoring the respective output.

Incorrect or missing input data will be corrected immediately:

- The error is immediately communicated to the calculation agent, if applicable.
- Calculation agent will be asked to investigate the reason for the error.
- An email will be sent to all affected clients to inform them about the error; this includes the reason for the issue and an estimate on when the issue will be solved.
- MarketVector Indexes recalculates missing EOD data points and disseminates to vendors and clients.

In case of a material error,

- Legal and Compliance to check the relevant agreements for liability of the calculation agent.
- If MarketVector Indexes identifies any conduct that may involve manipulation or attempted manipulation of an index by a calculation agent it will report this to the regulator.
- Where possible and economically reasonable MarketVector Indexes will try to use another calculation agent.

Investigations and communication regarding disruptions with calculation agents will be handled by Compliance and Senior Management. They are either caused by disruptions in calculation or dissemination, which might affect different servicers.

- The disruption is immediately communicated to the calculation/dissemination agent, if applicable.
- Calculation/dissemination agent will be asked to investigate the reason for the disruption.
- An email will be sent to all affected clients to inform them about the disruption; this includes the reason for the issue and an estimate on when the issue will be solved.
- MarketVector Indexes prompts calculation agent to make all efforts to restart index calculation.
- MarketVector Indexes prompts dissemination agent to make all efforts to restart index dissemination.
- MarketVector Indexes recalculates missing EOD data points and disseminates to vendors and clients.
- Legal and Compliance to check the relevant agreements for liability of the calculation/dissemination agent.
- If MarketVector Indexes identifies any conduct that may involve manipulation or attempted manipulation of an index by calculation/dissemination agent it will report this to BaFin.
- Where possible and economically reasonable MarketVector Indexes will try use another calculation and/or dissemination agent.





6 APPENDIX

6 Appendix

6.1 Changes to the Index Guide

Date	IG Version	Change
31 March 2021	1.1	Discretion in case of extraordinary events
2 August 2021	1.2	30 days announcement period for Index Guide changes
01 March 2023	1.3	Name changed from "Menai-MVIS" to "Menai- MarketVector [™] "





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7 Disclaimer

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