FTSE Grayscale Crypto Sector Index Series

In Association with Digital Asset Research

v1.0

The index series is not, and is not intended to be, used by supervised entities in the European Union or United Kingdom and accordingly, the European Benchmark Regulation* and the UK Benchmark Regulation# do not apply to the index series. Consequently, supervised entities within the European Union and the United Kingdom are not permitted to use the index series as a benchmark as set out in article 3(1)(7) of the European Benchmark Regulation.

For the avoidance of doubt, neither FTSE International Limited nor any other member of the London Stock Exchange Group plc group of companies, is the benchmark administrator (as defined in article 3(1)(6) of the European Benchmark Regulation) of the index series.

* Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds.

# The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019 (which amends the European benchmark regulation in the United Kingdom)
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Section 1

Introduction

1. Introduction

1.1 This document sets out the Ground Rules for the FTSE Grayscale Crypto Sector Index Series. The companion documents - Guide to the Vetting of Digital Assets and Digital Asset Exchanges and the Guide to the Calculation of the FTSE DAR Digital Asset Prices, should be read in conjunction with this document. Copies of both of these documents are available at www.lseg.com/en/ftse-russell/.

1.1.1 A digital asset is a Cryptographically Secured Digital Instrument for which the issuance, transfer and ownership is recorded on a data structure commonly referred to as a Blockchain.

1.1.2 The FTSE Grayscale Crypto Sector Index Series is designed to provide market participants a mechanism to evaluate digital asset investments and prices for certain sectors.

1.2 The FTSE Grayscale Crypto Sector Index Series does not take account of ESG factors in its index design.

1.3 The base currency of the FTSE Grayscale Crypto Sector Index Series is US Dollars (USD).

1.4 The FTSE Grayscale Digital Asset Sector Index Series incorporates the:

- FTSE Grayscale Currencies Crypto Sector Index
- FTSE Grayscale Smart Contract Platforms Crypto Sector Index
- FTSE Grayscale Financials Crypto Sector Index
- FTSE Grayscale Consumer and Culture Crypto Sector Index
- FTSE Grayscale Utilities and Services Crypto Sector Index

1.5 Indices are calculated at Price Return levels only.

1.6 FTSE Russell


1.7 FTSE Russell does not make any representation or warranty, express or implied, as to the accuracy, completeness or correctness of the FTSE Grayscale Crypto Sector Index Series.

1.8 No liability whether as a result of negligence or otherwise is accepted by FTSE Russell or any members of the FTSE DAR Grayscale Digital Asset Forum (or any person concerned with the preparation or publication of these Ground Rules) for any losses, damages, claims and expenses suffered by any person as a result of:

- any reliance on these Ground Rules, and/or
- any inaccuracies in these Ground Rules, and/or
- any non-application or misapplication of the policies or procedures described in these Ground Rules, and/or
– any inaccuracies in the compilation of the index series or any constituent data.
Section 2

Management responsibilities

2. Management responsibilities

2.1 FTSE International Limited (FTSE)

2.1.1 FTSE is the Benchmark Administrator of the Index Series.

2.1.2 FTSE is responsible for the daily calculation, production and operation of the index series and will:

- maintain records of the index weightings of all constituents;
- make changes to the constituents and their weightings in accordance with the Ground Rules;
- carry out periodic index reviews of the index series and apply the changes resulting from the reviews as required by the Ground Rules;
- publish changes to the constituent weightings resulting from their ongoing maintenance and the periodic reviews;
- disseminate the indices.

2.2 Digital Asset Research

2.2.1 Digital Asset Research (DAR) assesses the quality of pricing data, qualifies pricing sources, calculates the FTSE DAR Digital Asset Prices and supplies FTSE Russell with price feeds and advises on the eligibility of assets in the FTSE Grayscale Crypto Sector Index Series.

2.2.2 DAR is an independent, privately-owned research firm and data provider which partners with FTSE Russell in research into and providing data on digital assets.

2.2.3 DAR is responsible for the ongoing vetting of digital assets and of the Broker Dealer/Exchanges of digital assets. DAR collects and validates the data it obtains as Principal to identify ensuring both digital assets and Broker Dealer/Exchanges of digital assets pass a strict set of rules.

2.3 Grayscale

2.3.1 Grayscale is responsible for maintaining the digital asset sector classification of constituents of the FTSE Grayscale Crypto Sector Index Series.

2.4 Amendments to these Ground Rules

2.4.1 These Ground Rules shall be subject to regular review (at least once a year) by FTSE Russell to ensure that they continue to best reflect the aims of the index series. The feedback from these consultations will be considered by the FTSE Russell Index Governance Board before approval is granted.

1 FTSE is not the benchmark administrator of the Index Series as the term administrator is defined in the IOSCO Principles for Financial Benchmarks and Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds (the European Benchmark Regulation) and The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019 (the UK Benchmark Regulation).
Section 3
FTSE Russell Index policies

3. FTSE Russell Index policies

These Ground Rules should be read in conjunction with the following policy documents which can be accessed through the links below:

3.1 Queries and Complaints

FTSE Russell's complaints procedure can be accessed through the following link:
Benchmark_Determination_Complaints_Handling_Policy.pdf

FTSE Russell's appeal process can be accessed through the following link:
Appeals_Against_Decisions.pdf

3.2 Policy for Benchmark Methodology Changes

Details of FTSE Russell's policy for making benchmark methodology changes can be accessed through the following link:
Policy_for_Benchmark_Methodology_Changes.pdf

3.3 Real Time Status Definitions

3.3.1 For indices that are calculated in real time, please refer to the following guide for details of real time status definitions:
Real_Time_Status_Definitions.pdf
Section 4  
Digital asset eligibility

4. Digital asset eligibility

4.1 Eligibility requirements

4.1.1 Constituent digital assets in Benchmark and Non-Benchmark Assets in following sectors/subsectors are eligible for the index series.

- FTSE Grayscale Currencies Crypto Sector Index – Sector: Privacy-Preserving (701010); Subsector: Standard Monetary Protocols (70102010)
- FTSE Grayscale Smart Contract Platforms Crypto Sector Index – Sector: Smart Contract Platforms (702020)
- FTSE Grayscale Financials Crypto Sector Index – Subsector: Retail Payments & Point of Sale (70102015), Exchange Tokens (70201025)
- FTSE Grayscale Consumer and Culture Crypto Sector Index – Subsector: Digital Art, Collectibles & Non-Fungible Tokens (70201010), Video Games (70201020), Social Networks (70201040)
- FTSE Grayscale Utilities and Services Crypto Sector Index – Sector: Protocol interoperability (702030), Notarization and Supply Chain Management (702040), Distributed Computation & Storage (702050); Subsector: Advertising Platforms (70201035) Tokenized Wallet Applications (70201050), Smart Contract Oracles (70201060)

4.1.2 Constituents that are members of the applicable exclusion list from Grayscale are not eligible for the membership of the relevant index. Grayscale compiles the exclusion list by considering the following criteria:

- A digital asset's classification via eligible sectors and subsectors lacks the primary context of use associated with a given Crypto Sector.
- A digital asset's classification via eligible sectors and subsectors may not be representative of the distinct exposure associated with a given Crypto Sector.
- A digital asset may be excluded if it does not align with the overall objective of a given Crypto Sector.
- A digital asset may be excluded as a best fit in another Crypto Sector to ensure mutual exclusivity within the FTSE Grayscale Crypto Sector Index Series.
- A digital asset may be excluded due to limited information or data available to account for inclusion.

4.1.3 Constituents that are members of the applicable inclusion list from Grayscale that are not in the listed sectors/subsectors in 4.1.1 are eligible for the membership of the relevant index. Grayscale compiles the exclusion list by considering the following criteria:

- A digital asset may be included based on its current primary context of use associated with a given Crypto Sector.
- A digital asset may be included based on the distinct exposure provided by the protocol and the intended objective of a given Crypto Sector.
- A digital asset may be included based on signs of the asset’s long-term viability in connection with a given Crypto Sector.
- An applicable digital asset is not represented in the eligible sectors and subsectors for a given Crypto Sector.

**4.1.4** In addition to the criteria outlined in Rules 4.1.2 and 4.1.3, a constituents’ inclusion or exclusion in a relevant index may be subject to review by the FTSE DAR Grayscale Digital Asset Forum.

**4.1.5** Historical eligible constituent digital assets for the FTSE Grayscale Crypto Sector Index Series were based on the eligible constituents as of the review prior to each sector index launch.
Section 5

Periodic review of constituents

5. Periodic review of constituents

5.1.1 Index Reviews

5.1.2 The FTSE Grayscale Crypto Sector Index Series is reviewed on a quarterly basis in March, June, September, and December (the review month) using market information defined by circulating supply as at 4:00pm Eastern Time of the last day of the month prior to the review month (the data cut-off date).

5.1.3 The FTSE Grayscale Crypto Sector Index Series use the price as at 4:00pm Eastern Time on the Wednesday after the first Friday of the review month. The review will be implemented on the third Friday, after close of the review month.

5.2 Review Process

5.2.1 Market Value of Digital Assets in review process is defined by circulating supply described in 5.1.1 * price described in 5.1.2.

5.2.2 Non-existing Benchmark Assets constituents in the eligible universes are not selected if the market value is less than $50M. Non-existing Non-Benchmark Assets constituents in the eligible universes are not selected if the market value is less than X, where X is defined as following in each index:

- FTSE Grayscale Currencies Crypto Sector Index: $200M
- FTSE Grayscale Smart Contract Platforms Crypto Sector: $200M
- FTSE Grayscale Financials Crypto Sector Index: $100M
- FTSE Grayscale Consumer and Culture Crypto Sector Index: $100M
- FTSE Grayscale Utilities and Services Crypto Sector Index: $100M

5.2.3 Existing Benchmark Assets constituents are removed from the index if the market value is less than $40M, and existing Non-Benchmark Assets constituents are removed from the index if the market value is less than 80% of X of the corresponding sector indexes listed in 5.2.2.

5.2.4 Eligible digital assets will be tested for liquidity quarterly. For further details please refer to the Guide to Calculation Methods for Digital Asset Liquidity using the following link

FTSE_Global_Digital_Asset_Index_Series_Guide_to_Calculation_Method_for_the_Liquidity_Test

5.2.5 Eligible digital assets are also subject to the ADTV screen, where ADTV is defined as the daily average of the previous 4 weeks as of the Wednesday after the first Friday of the Rebalance Month’s total dollar trading volume. If the asset has less than 4 weeks history, the ADTV calculation is the daily average of the available dates trading volume. An asset must have at least 3 weeks trading record to be eligible. Non-existing constituents need to pass a $250K ADTV screen to be selected into the corresponding sector indexes, and existing constituents need to pass a $200K ADTV test to stay in the corresponding sector indexes.

5.2.6 Selected digital assets will be weighted by square root of the market values within each index.
Section 6
Changes to the constituent digital assets

6. Changes to the constituent digital assets

6.1 Intra-review additions
6.1.1 No intra-review additions for the FTSE Grayscale Crypto Sector Indices.

6.2 Intra-review Deletions
6.2.1 A constituent will be removed from the FTSE Grayscale Crypto Sector Index Series if it is removed from FTSE DAR Reference Price – Benchmark and Non-Benchmark Assets Universe. The deletion will be concurrent with the deletion from the Benchmark and Non-Benchmark assets universe and its weight will be distributed pro-rata amongst the remaining constituents of the FTSE Grayscale Crypto Sector Index Series.

6.2.2 Should an intra-quarter rebalance take place, a minimum of two days’ advanced notification with details on the review will be provided.
Section 7
Digital asset actions and network events

7. Digital asset actions and network events

7.1.1 Full details of changes to constituent digital assets at the quarterly review due to events can be accessed in the digital actions and network events guide through the following link:
Digital Actions and Network Events Guide
Section 8
Index calculation method

8. Index calculation method

8.1 Prices
8.1.1 FTSE calculates the FTSE DAR Reference Price for each digital asset using the method outlined in the document Guide to the Calculation of FTSE DAR Digital Asset Prices and FTSE DAR Reference Prices.

8.2 Calculation Frequency
8.2.1 The FTSE DAR Reference Price is calculated hourly and the 4:00pm Eastern Time fix is used for the calculation of the FTSE Grayscale Crypto Sector Index Series (4pm EST) and associated products.

8.3 Index Calculation
8.3.1 The FTSE Grayscale Crypto Sector Index Series calculation formula is described below:

\[ \sum_{i=1}^{N} \left( \frac{p_i(t) \times e_i(t) \times s_i(t) \times f_i(t))}{d} \right) \]

where,
- \( i = 1,2,\ldots,N \) – digital assets
- \( N \) is the number of digital assets in the index.
- \( t \) is the calculation time
- \( p_i(t) \) is the FTSE DAR Reference Price of the digital asset \( i \) at calculation time \( t \)
- \( e_i(t) \) is the exchange rate required to convert the digital asset \( i \) price into the index’s base currency at calculation time \( t \)
- \( s_i(t) \) is the circulations supply used by FTSE Russell for the digital asset, as defined in these Ground Rules at calculation time \( t \).
- \( f_i(t) \) is the Weighting Factor to be applied to a constituent to correctly weight that constituent in the index. This factor maps the market value of each digital asset to a notional market value for inclusion in the index.
- \( d \) is the divisor, a figure that represents the total capital of the index at the base date base hour. The divisor can be adjusted to allow changes to digital assets to be made without distorting the index in the FTSE Grayscale Crypto Sector Index Series.

8.4 Index opening and closing hours
8.4.1 The FTSE Grayscale Crypto Sector Index Series is calculated Sunday to Friday at 4:00pm Eastern Time
Appendix A

Further information

A glossary of terms used in FTSE Russell’s Ground Rule documents can be found through the following link:
Glossary - Digital Assets.pdf (ftserussell.com)

Further information on the FTSE Grayscale Crypto Sector Index Series is available from FTSE Russell.
For contact details please visit the FTSE Russell website or contact FTSE Russell client services at
info@ftserussell.com.

Website: www.lseg.com/en/ftse-russell/