Benchmark Statement

CME CF Cryptocurrency Pricing Products

Version: 4.0

Version Date: 30th July 2021
## Contents

1. Version History .............................................................. 2  
2. Introduction .................................................................. 3  
3. Benchmark Description and Aims ................................. 3  
4. Methodology .................................................................. 3  
5. General disclosure ........................................................ 4  
6. Usage of the Benchmarks ............................................. 5  
7. Publication timings ........................................................ 5  
8. Changes to, or Cessation of the Benchmark ................ 6  
9. Oversight ........................................................................ 6  
10. Updates to this Statement .............................................. 6
# 1. Version History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>4th September 2019</td>
<td>Initial version</td>
</tr>
<tr>
<td>2.0</td>
<td>20th May 2020</td>
<td>Update copyright, news link</td>
</tr>
</tbody>
</table>
| 3.0     | 28th July 2020  | Additional detail added to:  
• Section 3 – Benchmark Uses and Aims  
• Items to Section 4 – Methodology  
• Items ot Section 6 – Usage of the Benchmarks  
• Section 8 renamed to Changes to, and Cessation of the Benchmark with additional descriptions |
| 4.0     | 30th July 2021  | Amendments to Restatement & Republishing                                |
2. Introduction

CF Benchmarks Ltd (CF Benchmarks) is the Benchmark Administrator for the CME CF Cryptocurrency Pricing Products.

This Benchmark Statement is published by CF Benchmarks in compliance with Article 27 of EU Regulation 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 and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (the Benchmarks Regulation or BMR) and should be read in conjunction with the related documentation available on the CF Benchmarks website (http://www.cfbenchmarks.com/documentation) and the Administrators policies.¹

CF Benchmarks was authorised by the United Kingdom Financial Conduct Authority with an effective date of 19th August and was granted a Part 4A permission under Part 4A of the Financial Services and Markets Act 2000 (“FSMA”) to carry on the regulated activity of administering a benchmark. That Part 4A permission constitutes CF Benchmarks Ltd.’s ‘Registration’ for the purposes of Article 34 of the BMR.

CF Benchmarks was included in the ESMA Register of Benchmark Administrators on 21st August 2019.

This Benchmark Statement was published on 4th September 2019. Any updates to this statement will be duly recorded in the version history.

3. Benchmark Description and Aims

The benchmarks within the family seek to measure the price of the base asset of the benchmark in the denomination of the quote asset by observing the economic reality of the exchange of one for the other.

4. Methodology

The CME CF Cryptocurrency Pricing Products are a family of benchmarks that measure the value of Cryptocurrencies and digital assets relative to fiat currencies. Within the family there are both Reference Rates and Real Time Indices. To date, the benchmarks within the family are:

¹ Available upon request
- CME CF Bitcoin Reference Rate and the CME CF Ether-Dollar Reference Rate (subject to the Reference Rate Methodology)

CME CF Bitcoin Real Time Index and CME CF Ether-Dollar Real Time Index (subject to the Real Time Index Methodology). The methodologies referred to comply with the criteria set out in article 12 of the BMR and:

a. are robust and reliable
b. have clear rules identifying how and when discretion may be exercised in the determination of the benchmark(s)
c. are rigorous, continuous and capable of validation including, where appropriate, back-testing against available transaction data
d. are resilient and ensures that the benchmark can be calculated in the widest set of possible circumstances, without compromising its integrity
e. are traceable and verifiable.

The methodologies are reviewed by the Administrator and approved by the CME CF Oversight Committee on a no less than annual basis

**Republishing and Restatement**
The Administrator operates a Republishing and Restatement Policy that has been approved by the CME CF Cryptocurrency Pricing Products Oversight Committee. This policy is implemented for the CME CF Cryptocurrency Reference Rates through section 6 of the methodology which is available [here](#).

The CME CF Cryptocurrency Real Time Indices are not restate or republished under any circumstances due to their high frequency nature.

**Expert Judgement**
The Administrator does not utilise expert judgment in the day to day calculation of the Reference Rates. In extraordinary circumstances Expert Judgement may be exercised by the Administrator in accordance with its codified policies and processes which are available upon request.

Further information on the CME CF Reference Rate Methodology is available [here](#). Further information on the CME CF Real Time Index Methodology is available [here](#).

### 5. General disclosure

The CME CF Cryptocurrency Pricing Products Family of benchmarks is deemed non-significant in accordance with article 26 of the BMR.
CF Benchmarks as the administrator of the CME CF Cryptocurrency Pricing Products family has applied all applicable provisions of the BMR, including but not limited, to the below articles:

- Conflict of Interest (Article 4) - please see here for the applicable conflict of interest policy
- Oversight function (Article 5) - please see here for the CME CF Cryptocurrency Pricing Products Oversight Committee Charter
- CF Benchmarks Control Framework (Article 6), and CF Benchmarks Accountability Framework² (Article 9)
- CF Benchmarks Input data Policy (Article 11)
- Code of Conduct and Requirements for Contributors (Article 15 & 16) – the CME CF Cryptocurrency Pricing Products do not utilise contributed data as input data. The Administrator has therefore not applied the provisions contained in these articles to the CME CF Cryptocurrency Pricing Products.

6. Usage of the Benchmarks

The CME CF Cryptocurrency Pricing Products family of benchmarks has been specifically designed to facilitate the valuation of and settlement of financial instruments, including but not limited, to futures contracts made available for trading on trading venues and platforms. The CME CF Cryptocurrency Pricing Products family of benchmarks are also intended to be used for the creation/ redemption and valuation of investment funds and products.

Further information on the CME CF Cryptocurrency Pricing Products family is published on the CF Benchmarks website at www.cfbenchmarks.com

The methodologies have been designed to be able to calculate the benchmarks in the widest set of possible circumstances, however at times of acute market stress or should the market for trading of the quote asset change fundamentally then the methodology may not be able to be calculated. In such instances the benchmark may undergo calculation failure as described in the benchmark methodologies.

7. Publication timings

The usual publication time for CME CF Reference Rates is 16.01 London time.

CME CF Real Time Indices are published every second, in accordance with predetermined CF Benchmarks procedures as described in the methodology.

² Available upon request
Any exceptions to the provisions of the Methodology and other news pertinent to index users and the wider market shall be published on the CF Benchmarks website at:

blog.cfbenchmarks.com.

8. Changes to or Cessation of, the Benchmark

There may be circumstances where CF Benchmarks determines a change is required to be made to the published methodology to ensure the integrity of the benchmark. In these instances, CF Benchmarks, in accordance with the relevant provisions of Article 27 and 28 of the BMR will conduct a Benchmark Consultation Process as described in the CF Benchmarks Governance and Oversight Framework which is available upon request to interested parties. All relevant information pertaining to the Benchmark Consultation Process will be published on its website.

There may also be circumstances where the CF Benchmarks determines that cessation of a benchmark may be necessary, this could be due to input data becoming unavailable. In these instances, CF Benchmarks, in accordance with the relevant provisions of Article 27 and 28 of the BMR will conduct a Benchmark Cessation Process as described in the CF Benchmarks Governance and Oversight Framework which is available upon request to interested parties. All relevant information pertaining to the Benchmark Cessation Process will be published on its website.

Where methodology changes or cessation do occur, this could impact the market for financial instruments and investment funds that utilise the benchmark in the manner described in Article 3 (7) of the BMR.

9. Oversight

The CME CF Cryptocurrency Pricing Products family of benchmarks has an independent Oversight Committee, with minutes of the meetings made publicly available. In addition, membership criteria and the Oversight Committee Charter are also available on the CF Benchmarks website at the following link: www.cfbenchmarks.com/documentation

10. Updates to this Statement

CF Benchmarks shall update this benchmark statement in the event of any changes to the information provided hereunder, including but not limited to any updates to the Methodology.
This Benchmark Statement shall in any case be subject to review at least every two years (article 27 of the BMR).
## Contact Information

**CF Benchmarks Ltd**

<table>
<thead>
<tr>
<th>Address</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF Benchmarks Ltd 4th Floor 25 Copthall Avenue London EC2R 7BP United Kingdom</td>
<td>Web: <a href="http://www.cfbenchmarks.com">www.cfbenchmarks.com</a> Phone: +44 20 7655 6085 Email: <a href="mailto:contact@cfbenchmarks.com">contact@cfbenchmarks.com</a></td>
</tr>
</tbody>
</table>
Notice and Disclaimer

CF Benchmarks Ltd is registered in England with registered number 11654816 and registered office at 25 Copthall Avenue, London EC2R 7BP, United Kingdom. CF Benchmarks is authorised by the UK Financial Conduct Authority as a registered Benchmark Administrator (FRN 847100).

This document and all of the information contained in it, including without limitation all methods, processes, concepts, text, data, graphs, charts (collectively, the “Information”) is the property of CF Benchmarks Ltd or its licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with CF Benchmarks Ltd, the “Information Providers”) and is provided for informational purposes only. The Information may not be reproduced or disseminated in whole or in part without prior written consent from CF Benchmarks Ltd.

The Information may not be used to create derivative works or to verify or correct other data or information without prior written consent from CF Benchmarks Ltd. For example (but without limitation), the Information may not be used to create indices, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other CF Benchmarks Ltd data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. CF BENCHMARKS SOEA NOT MAKE ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IT EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall CF Benchmarks have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or wilful default of itself, its servants, agents or sub-contractors.

None of CF Benchmarks Ltd’s products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and none of CF Benchmarks Ltd’s products or services is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such.

Any use of or access to products, services or information of CF Benchmarks Ltd requires a license from CF Benchmarks Ltd. CME Group and CME are trademarks of Chicago Mercantile Exchange Inc., used here with permission. All other trademarks are the property of their respective owners.