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CF Cryptocurrency Index Family Oversight Function Meeting Minutes July 28th & August 7th 2020

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Attendees & Quorum

Ms Evelien Van Den Arend (Oversight Function)

Sui Chung (Administrator)

The meeting began at 1200 London Time

Conflicts of Interest

The Oversight Function confirmed it was not subject to any conflicts of interest that have arisen since the previous meeting and that none of the agenda items presented a conflict.

1 Standing Items

The Administrator reminded the Oversight Function of the monthly metrics reports that had been provided since the previous meeting and asked for questions and comments. The Oversight Function confirmed there were no questions on the monthly metrics. The Administrator summarised the surveillance alerts that had been triggered and reviewed. The Oversight Function had no queries regarding these alerts that had been reviewed and closed since the last meeting of the OVersight Function.

The Administrator set out the remedial action that had been taken to prevent further outages experienced in the period between June 10th to June 28th 2020. The Oversight function confirmed the appropriateness of the additional scraproxy added to increase capacity which the Administrator confirms has been thus far successful in preventing further outages since its implementation.

The Administrator also detailed the outage experienced on July 17th 2020 caused by an issue at Cloudflare which impacted a plethora of businesses who utilise cloud computing services. The Administrator confirmed that the LTC-USD, XRP-USD and BCH-USD spot rates incurred a longer disruption due to the auto-restart protocols not triggering. A manual restart was used instead for these indices. A new alarm system has been tested and rolled out across the Administrator to ensure quicker response times in future instances of disruption.

A notification regarding the outage was published on the Administrators website to notify downstream users.

2 Update to the Administrators BMR Audit and Recommendations from Auditor

The Administrator informed the Oversight Function of the recommendations from the Auditor and how the Administrator has implemented certain updates to address some of the minor findings. The Oversight function approved of the changes made to the CF Oversight Function ToRs, the CF Settlement Price and Spot Rate Methodologies and the CF Hard Fork Policy. The Oversight Function asked to update the version history of the

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documents which the Administrator agreed to.

The Administrator highlighted the revised definition of "new token" in its Hard Fork policy and explained this would follow the market designation of the new token vs the original token referring to the trading symbol used by market consensus for each of the tokens. The Administrator also summarised the minor proposed changes made to the methodology documentation, including the added definition of "underlying economic reality" and a paragraph on its use of "expert judgment" in some very rare instances. The Oversight Function resolved to approve the changes being implemented noting that these are not material and do not have any impact on the way the benchmarks are created.

3 Proposed change to the implementation of the Potentially Erroneous Data Parameters for CF Spot Rates

The Administrator proposes to amend the implementation of the potentially erroneous data parameter by continuing to exclude order books that exhibit mids that are deviated by more than 10% from the median of the valid order books. Once excluded an orderbook will only be included again when its absolute deviation is less than 50% of the potentially erroneous data parameter. Once included again, an orderbook is then treated as any other orderbook and will be excluded if it deviates by more than 10% from the median of all valid orderbook mids.

After examining example data, the Oversight Function agrees that this proposal would result in a smoother path of values and a better representation of the true price. The Oversight Function agrees with the Administrator that the change isn't deemed material in accordance with the CF Benchmarks Governance & Oversight Framework and therefore a consultation will not be needed before the implementation of this methodology.

4 CF Multi Cryptocurrency Index Series Ground Rules and CF Ultra Cap 5 Launch

The Administrator proposed to launch the CF Cryptocurrency Ultra Cap 5 Index in the coming weeks and asked the Oversight Function to confirm its review of the methodology and input data in accordance with the CF Benchmarks Governance & Oversight Framework and the CF Benchmarks Input Data Policy.

The Oversight Function was further asked to resolve to adopt the CF Cryptocurrency Ultra Cap 5 Index and provide Oversight of the index as the first in a new CF Multi Cryptocurrency Index Series within the CF Cryptocurrency Index Family of Indices. The Oversight Function awaits the Administrator's publication of a new Benchmark Statement for the CF Multi Cryptocurrency Index Series upon the launch of the index which the Oversight Function will review.

The Administrator provided an overview of its new benchmark methodology assessment.

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The Administrator confirmed there had been no discrepancies in the back testing and no instances of failure in 3 months. The Oversight function questioned the Administrator on the availability rate of the indices and the Administrator confirmed these were above the 97% threshold and in fact were all above 99% in availability.

The Oversight Function asked the Administrator if they will be notifying the FCA of this and the Administrator confirmed they will be. The Administrator also confirmed that the auditors findings will be shared with the regulator.

The Oversight Function resolved to approve the CF Ultra Cap 5 launch subject to the review of the benchmark statement.

The meeting was adjourned at 1300 London Time so that the Oversight Function could review the launch analysis for the launch of new single asset indices to the CF Cryptocurrency Index Family. The meeting began again at 1400 London time on August 7th.

5 Adoption of the PAXG-USD Settlement Price and Spot Rate

The Oversight Function sought further details around PAXG. The administrator confirmed it was a stable coin backed by gold and that the token is listed on Kraken and itBit.

The Administrator set out wishes to add a PAXG settlement price and spot rate and in the longer term use the benchmark as a reference price for gold. The Oversight function asked how close to the official spot price of gold PAXG is, the Administrator answered that in tests carried out by the Administrator, the largest difference between the LME and PAXG price was 0.15%.

The Oversight function questioned how liquid PAXG is. The Administrator referenced the accompanying excel spreadsheet to demonstrate that currently it isn't hugely liquid, as it is new and there isn't a great means of speculation. The administrator went on to show there were not huge amounts of trading, PAXG was held as an asset more than it was traded. The Administrator confirms that in tests of the data, there were some 90-minute partition windows with some empty instances, but no instances where the entire window is empty. This included weekends where the liquidity does fall.

The Oversight function had further questioned the pricing of PAXG compared to gold and its use cases. The Administrator detailed that PAXG did not exactly match the price, there was a differential due to underlying cost including trading fees and crossing the spread.

The Administrator went on to describe how the PAXG order book, although not as much as BTC/USD, had good depth. The Oversight Function asked the Administrator when the proposed launch date would be.

The Administration confirmed it would be two weeks from approval. The Oversight Function resolved to approve the PAXG-USD settlement price and spot rate.

6 Adoption of the LINK-USD Settlement Price and Spot Rate

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The Administrator proposed to launch a settlement and spot price of Link from Coinbase and Kraken orderbook data, with 90 minute windows and 10 minute partition length. The Administrator referred to data in the agenda to demonstrate that LINK was very liquid and that there were no empty windows and just one empty partition in the 90 day period that was calculated. The Oversight Function questioned if the empty partition was due to an outage. The Administrator confirmed that this was due to a Coinbase outage. The Administrator went on to announce that Bitstamp plans to list LINK soon, and if the introduction of LINK to the exchange is promoted with a fee free trading period, the Administrator will wait till that is over to assess volume contribution before seeking to add them.

The Oversight Function resolved to approve the adoption of the LINK-USD settlement price and spot rate.

7 Adoption of the XBT-EUR Settlement Price and Spot Rate

The Administrator covered the key metrics to the Oversight Function and referred to the attached Excel spreadsheet for a full breakdown of the data.

The Oversight Function asked why there would be a separate liquidity pool for XBT-EUR rather than XBT-USD. The Administrator said that this was being launched to better measure economic reality, which may differ between XBT and XBT-EUR.

The Oversight Function asked what the difference between the EUR and USD XBT rates usually look like. The Administrator confirms that they track very closely.

The Oversight Function asked when the expected launch date would be.

The Administrator confirmed this would be in around 3 weeks-time. The Oversight Function resolved to adopt the XBT-EUR indices

8 Adoption of the ETH-EUR Settlement Price and Spot Rate

The Administrator proposed to launch ETH-EUR settlement and spot rate. The Administrator covered the key parameters and metrics to the Oversight Function and referred it to the attached Excel spreadsheet for a full breakdown of the data. The input data would be sourced from Coinbase, Bitstamp and Kraken. The Administrator demonstrated that there was good liquidity, around 2000 asks and 1600 bids, but that liquidity did drop off slightly.

The Oversight Function asked if there was a reason for this.

The Administrator suspected that this was possibly due to an increase in the ETH price. The Oversight Function asked when the expected launch date would be.

The Administrator confirms that the introduction of the USD-LINK and USD-PAXG indices will be rolled out together, and a few weeks after, the EUR-XBT and EUR-ETH will be introduced at the same time.

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The Oversight Function resolved to approve the launch of ETH-EUR spot rate and settlement price.

9 A.O.B.

The Administrator reminded the Oversight Function that after the audit has been conducted, a compliance monitoring programme shall be implemented in order to ensure ongoing compliance is required for the Administrator to remain compliant with EU BMR.

There being no further business the meeting was adjourned at 1300 London time.