



CME CF OVERSIGHT COMMITTEE

Meeting Minutes - Summary

27th February 2019

Agenda

1	Attendees & Quorum.....	3
2	Conflicts of Interest.....	4
3	Impact on the CME CF BRR Due to Data Errors from Constituent Exchange itBit and the Processes Undertaken by the Administrator.....	5
4	Monthly CME CF Cryptocurrency Pricing Products Metrics Report.....	6
5	Proposed adjustments to the Order Size Cap Parameter for Real Time Indices.....	7
6	Constituent Exchange Criteria - Codifying the Minimum Volume Contribution for Constituent Exchanges and proposed changes to the rule	8
7	Conflict of Interest Assessment due to Change in Ultimate Ownership of the Index Administrator	9
8	AOB.....	11

1 Attendees & Quorum

Gavin Lee: **Chair**, CME

Dr. Timo Schlaefer (**TS**): Crypto Facilities

Payal Lakhani (**PL**): CME

Max Boonen (**MB**): B2C2

Prof. Willian Knottenbelt (**WK**): Imperial College London

Michael Moro (**MM**): Genesis Global Trading

Andreas Antonopoulos (**AA**): Independent Expert

One non-member of the Committee, Sui Chung representing Crypto Facilities, the Administrator, attended the meeting to answer any questions from Committee Members.

WK was joined the meeting at around 1700 LDN.

The Meeting began at 1600 London Time.

2 Conflicts of Interest

Two committee members raised conflicts. They were available to discuss the relevant items but were recused from voting.

Chair: Thanked individuals for the disclosures and asked the Administrator to note the conflict in its records and undertake any further action its policies would require.

3 Impact on the CME CF BRR Due to Data Errors from Constituent Exchange itBit and the Processes Undertaken by the Administrator

The Administrator presented documents that described the events and actions undertaken by the Administrator that led to the temporary suspension of itBit at 1400 LDN from the CME CF BRR at January 25th, 2019 and the subsequent lifting of the suspension on February 1st at 1630 LDN. An analysis of the impact to the CME CF BRR value for the period that the ItBit Market Data API had provided trade data that included errors was also presented.

The committee discussed both the impact of the data errors and the suspension of itBit as a constituent exchange on the calculation of the CME CF BRR. And asked the Administrator

- What measures had been implemented or considered for implementation to identify similar issues more promptly in the future.
- If it had received any queries or complaints in reaction to the temporary suspension of itBit

The Administrator confirmed that

- Data quality assurance measures are in place to identify the errors that the itBit data contained through a full match of parameters. Due to this incident the Administrator was developing a new measure that involved identifying exceptions with partial matches. Given the approximate nature of this measure it would take some time for the Administrator to calibrate this and verify the exceptions with constituent exchanges to identify errors.
- It had received a query via email in response to the announcement that had been published on the Administrators website. The query requested more detail on the circumstances that led to temporary suspension of itBit from the CME CF BRR. The email was responded to promptly confirming that any further disclosures and updates would be made public on the Administrators website- a copy of the full correspondence was presented to the committee.

The committee confirmed that the actions of the Administrator were in accordance with the published policies of the CME CF Cryptocurrency Pricing Products and agreed that the policy to not republish the CME CF Cryptocurrency Pricing Products remained appropriate for their stated aims.

4 Monthly CME CF Cryptocurrency Pricing Products Metrics Report

The Administrator presented the Metrics Report, describing the metrics, their purpose and how they were derived. The attention of the committee was drawn to specific metrics that had triggered further actions by the Administrator. Then asked the committee whether there were any questions on the contents of the report.

The committee discussed aspects of the report including the frequency with which it would be provided and was satisfied with its contents and the Administrators confirmation of monthly frequency.

The committee agreed that the reports would assist it in providing oversight of the CME CF Cryptocurrency Pricing Products.

5 Proposed adjustments to the Order Size Cap Parameter for Real Time Indices

The Administrator reminded the committee of the CME CF Real Time Index Methodology and its utilisation of an order size cap to negate any distortive effects that very large orders might have on the index level. Analysis of the proportion of the orders that were utilised as input data for both the CME CF BRTI and CME CF ETHUSD_RTI since May 2018 (the month of inception for the CME CF ETHUSD_RTI). It proposed amending the order size cap for CME CF ETHUSD_RTI to 2,000 ETH from its current level of 100 given the fall in the prevailing price for ETH and the relatively high frequency at which it is utilised relative to that for XBT in the calculation of the CME CF BRTI.

The committee discussed:

- The relative frequency of the order size cap being utilised in calculation of the CME CF BRTI versus the CME CF ETHUSD_RTI and was very high for the CME CF ETHUSD_RTI
- That the fall in price of any asset coupled with a constant tick size would mean that order levels would become more compressed and more volume would coalesce at each individual level and that amending the order size cap parameter would be appropriate
- The optimal manner in which an order size cap parameter should be calibrated for the CME CF Real Time Index Methodology

The committee resolved for the order size cap parameter utilised in the calculation of CME CF ETHUSD_RTI should be amended to 2,000 ETH on a temporary basis until the Administrator could present a dynamic mechanism for calibrating the order size cap parameter for the committee's consideration.

6 Constituent Exchange Criteria - Codifying the Minimum Volume Contribution for Constituent Exchanges and proposed changes to the rule

The Administrator Informed the committee that the latest documentation published on its website had omitted the details of Constituent Exchange Criterion One – Volume Contribution and that this would need to be reinstated. It also proposed amending the rule to apply different criteria for eligibility as a constituent exchange of a Reference Rate and Real Time Index for the same asset pair.

The committee discussed:

- The reasons for the differing approaches to Reference Rate and Real Time Index volume criteria inclusion in the Administrators proposal
- The exact method of determination for the defined thresholds of the proposal and the possibility of having different constituent exchanges for Reference Rates and Real Time Indices for the same asset pair
- How closely linked are the Reference Rates and Real Time Indices for an asset pair in the minds of index users and market participants and whether different constituent exchanges would cause confusion.

The committee discussed allowing different constituent exchanges for Reference Rates and Real Time Indices of the same currency pair and agreed that maintaining consistency between the RTI and RR on an individual currency pair basis would cause least confusion in the market.

The committee resolved that the existing volume contribution rule for constituent exchanges should be codified in the Administrators published documentation.

WK joined the meeting c. 1700 LDN

7 Conflict of Interest Assessment due to Change in Ultimate Ownership of the Index Administrator

The Administrator had provided a Conflict of Interest analysis to committee members in light of Payward, Inc. (Kraken) acquiring 100% of the shares of Crypto Research, the holding company that controls Crypto Facilities on December 28th, 2018.

In response to a question from the committee the Administrator detailed the specific layers of controls that had been put in place to mitigate for any conflicts of interest that may arise, including:

- The policies and processes the administrator had in place that had been previously reviewed by the committee
- The creation of a separate legal entity dedicated to index administration housing all index activities including IP, employees, IT platform and index administration policies and processes
- The index administration entity was in the process of regulatory authorisation that would mean supervision from a regulator of high standing
- The regulatory path would mean senior management positions requiring the authorisation of the regulator and the individuals being held personally responsible for the actions of the firm

The committee discussed the chain of governance and control of the new dedicated index administration entity including whether there was any overlap of individuals and what conflicts of interest they may be subject to.

The committee discussed a number of scenarios where conflicts of interest may arise due to the ultimate owners of the Administrator also being a constituent exchange that is utilised as an input data source for the CME CF Cryptocurrency Pricing Products. These conflicts could place the integrity of the CME CF Cryptocurrency Pricing Products at risk especially where they might concern benchmark manipulation or suspicious activity.

The Administrator reminded the committee that its policies and processes in scenarios of suspected benchmark manipulation are clearly documented and do not involve any management organs such as the board of directors of the administrator or any of the entities within the chain of control.

The committee discussed the manner in which the administrator would be supervised by the appropriate regulatory authority including its individuals it sought to appoint to senior

management positions requiring the authorisation of the regulator and the individuals being held personally responsible for the actions of the firm.

The committee was satisfied by the open manner in which the Administrator answered the committee's questions and did not raise any immediate concerns.

The committee voiced its desire to see greater independence brought to the governance of the Administrator and asked for it to consider the appointment of independent directors.

The committee asked the Administrator to provide an entity structure diagram so that committee members would have a clear picture of the control structure of the administrator since the change of ultimate ownership.

The Administrator acknowledged the recommendations of the committee and would keep the committee apprised of its developments in bringing further independence to its governance organs and agreed to provide the requested materials.

8 AOB

Chair: Asked committee members if there was any other business.

The meeting was adjourned c. 1810 LDN