CME CF Cryptocurrency Pricing Products
Oversight Committee Meeting Minutes (SUMMARY)

November 19th 2025

Contents

1 Attendees & Quorum

The Chair: Payal Shah
MR: Maximilian Ruscher
MM: Michael Moro
TS: Timo Schlaefer
WK: William Knottenbelt
MB: Max Boonen
GV: Giovanni Vicioso

The Administrator: Sui Chung (CEO)
The Administrator Compliance: Alise Kane (Compliance Officer)

Absentees: Timo Schlaefer and James Corbitt were unable to attend this meeting.

No new conflicts of interest were declared. The meeting begun at 14:07 (London Time) after quorum was declared.

2 Standing Items

Surveillance Alerts
The Administrator reported a significant number of Surveillance Alerts since the previous meeting, the majority occurring on 10, 11 and 12 October 2025 across a broad range of asset pairs amid significant market volatility. No constituent exchanges were excluded from any Reference Rate calculations as a result, and no suspicious activity or structural issues were identified.

The Administrator further explained that write-ups had been completed or were in progress for the relevant exceptions reviewed. Some reports remained outstanding pending responses from constituent exchanges, and the final compilation of reports would be provided once complete.

Assets Benchmarked
The Administrator confirmed that Assets Benchmarked to CME CF Cryptocurrency Pricing Products as of June 30th, 2024, remain below the €50bn threshold and therefore CF Benchmarks indices will remain “Non-Significant”.

Quarterly Metrics Reports
The Administrator presented the quarterly metrics reports, prepared before the October market correction, noting liquidity had been robust with no calculation failures. The orderbook inclusion rate for Bullish Exchange is now close to complete following a fix to the orderbook consolidation mechanism.

CF Volatility Series Renamed to CME CF Volatility Series
The Administrator confirmed that the CF Volatility Series is being rebranded to the CME CF Volatility Series for commercial reasons. The series will remain outside the scope of the CME CF Index Family, and this will be made clear in the relevant documentation.

3 Update on Administrators Constituent Exchange Review and Conformance to the Constituent Exchange Criteria

The Administrator's Compliance function presented the annual Constituent Exchange Review and confirmed that, based on the review completed, all Constituent Exchanges continue to meet the CME CF Constituent Exchange Criteria. The 2025 review included a specific focus on surveillance model testing and benefited from increased regulatory oversight of constituent exchanges as regimes such as MiCA have come into force.

The Committee discussed the Central Bank of Ireland enforcement action against Coinbase Europe Limited relating to AML/CFT deficiencies, noting the action resulted in a fine with no indication of further restrictions.

The Committee resolved that it had provided oversight to the Administrator's review of the conformance of the Constituent Exchanges to the CME CF Constituent Exchange Criteria.

4 Launch of HBAR-USD; TAO-USD and APT-USD Single Asset Benchmarks

The Administrator explained that it continues to receive interest from licensees that wish to see benchmarks for further assets and time variants that synchronise to the US financial market close of 1600 New York Time and the APAC financial market close of 1600 Hong Kong Time.

The Committee and the Administrator discussed three assets:
HBAR (Hedera); TAO (Bittensor) and APT (Aptos) and concluded that pricing is healthy and tight, with proposed constituent exchanges showing growing volume. The Committee discussed transaction volumes published by Constituent Exchanges and noted that the hour preceding 1600 London Time/New York Time/Hong Kong Time was liquid for all the Asset Pairs in question. The committee then went on to analyse the data sufficiency metrics and agreed that there was ample trading volume.

One of the Committee members asked whether the Administrator continues to monitor the existing index portfolio for benchmarks that could be discontinued and the Administrator confirmed ongoing review, with no current concerns, noting some lower-profile assets still have licensee demand.

Another Committee member asked why Ethena wasn't covered by the proposal. The Administrator explained there isn't yet sufficient backtest data to share with the Committee to review but it will be presented once that data is available.

The Administrator asked that the Committee resolves to provide oversight of the resultant Reference Rates and Real Time Indices which the Administrator shall seek to begin publishing shortly.

The Committee resolved on the launch of proposed Reference Rates and Real Time Indices below:

HBAR-USD
- CME CF Hedera-Dollar Reference Rate
- CME CF Hedera-Dollar Reference Rate - New York Variant
- CME CF Hedera-Dollar Reference Rate - Asia Pacific Variant
- CME CF Hedera-Dollar Real Time Index

TAO-USD
- CME CF Bittensor-Dollar Reference Rate
- CME CF Bittensor-Dollar Reference Rate - New York Variant
- CME CF Bittensor-Dollar Reference Rate - Asia Pacific Variant
- CME CF Bittensor-Dollar Real Time Index

APT-USD
- CME CF Aptos-Dollar Reference Rate
- CME CF Aptos-Dollar Reference Rate - New York Variant
- CME CF Aptos-Dollar Reference Rate - Asia Pacific Variant
- CME CF Aptos-Dollar Real Time Index

5 Addition of USDC Markets Operated by Constituent Exchanges as Input Data to the CME CF Single Asset Series

The Administrator introduced the agenda item and noted that the proposed addition of USDC markets had been discussed with the Oversight Committee at the previous meeting. The Administrator explained that the proposal had several components: the treatment of USDC spot markets within the existing Reference Rate methodology, the application of the Potentially Erroneous Data (PED) parameter, and whether the proposed change should be treated as material or non-material under the Administrator's governance framework.

The Administrator said it was currently comfortable with USDC from a regulatory perspective, noting that USDC meets relevant requirements in the EU and has also been considered under developing stablecoin regimes elsewhere. The Administrator then described how the methodology would work in practice: USDC markets on CME CF Constituent Exchanges would be treated as separate markets from USD markets on the same exchange, with USDC trades converted using the relevant USDC value within each partition so they could be incorporated into the volume-weighted median alongside USD markets. This would apply to both Reference Rates and Real Time Indices.

One Committee member asked whether the calculation would compare prices on the USDC and USD order books directly and assess any variance between them. The Administrator said no separate range or variance check was proposed; instead, the PED parameter would apply at the individual market level, with the safeguard operating through the overall calculation methodology.

Another Committee member asked whether the proposed approach would apply to both Reference Rates and Real Time Indices. The Administrator confirmed it would apply to both, with Real Time Indices observing USDC order books before consolidating them into USD-equivalent values.

A further Committee member raised concerns about applying the PED parameter separately to USD and USDC books, noting that in a stress scenario involving a stablecoin depeg or a market-specific liquidity event, the USDC market could diverge materially from the USD market, potentially introducing an additional source of calculation error. The Administrator responded that the use of volume-weighted medians provides protection, since a dislocation would need to occur in a sufficiently large market to have a meaningful impact. The Administrator was not seeking a resolution at this stage, but was instead seeking the Committee's concerns and views on where further analysis would be helpful, and agreed to prepare worked examples addressing the scenarios raised.

Other Committee members asked whether the proposal could extend more broadly across USD and USDC markets, or beyond the existing exchange universe, and how the approach compared with other benchmark administrators' treatment of stablecoins. The Administrator confirmed the current proposal was limited to qualifying USDC markets on existing Constituent Exchanges, with any wider changes to the Constituent Exchange Criteria to be considered separately in future and noted that CF Benchmarks is something of an outlier in not currently incorporating stablecoin markets, with other providers taking varied approaches. One Committee member added that the Committee should be mindful of market standards while also being alert to the risk that excluding relevant liquidity could make the benchmark less representative, noting that no client complaints about replicability had been received to date.

The Administrator closed by noting that manipulation resistance remains the key concern for Reference Rates, that the perceived risk from USDC has receded as it has become more clearly recognised within regulatory frameworks, and that stablecoin handling is likely to become increasingly important as adoption grows. No resolution was sought at this meeting; the Administrator agreed to prepare further analysis of the scenarios discussed, including stressed market conditions and depeg events, before returning to the Committee to seek a formal resolution on the proposed methodology change.

6 Launch of CME CF Digital Asset 10 Index

The Administrator introduced the agenda item and explained that the discussion is related to the proposed launch of a new "Multi Asset" sub-family under the CME CF Cryptocurrency Pricing Products index family. The Administrator noted that it was not seeking a resolution to launch the index at this meeting. The Administrator explained that, while the Committee had previously discussed and agreed the ground rules for the Multi Asset Series, the proposed detailed rules had not yet been used in practice because the Administrator does not currently administer portfolio indices within the CME CF index family.

One Committee member raised a concern about the proposed use of Generic Listing Standards, particularly the requirement linked to a regulated futures contract, noting a potential reflexivity problem since the availability of a futures contract could itself determine index eligibility, this risked acting as a gatekeeping criterion that could keep certain assets out. The Administrator acknowledged the concern, noting that this could initially prevent some licensees from replicating the same index exposure, but said the first reconstitution and rebalance (scheduled for the first business day of September 2026, with biannual rebalancing thereafter) was designed to give the market and licensee products time to align. The Administrator also pointed out that CME is not the only venue offering CFTC-regulated crypto futures - Coinbase Derivatives and others may also qualify - so the rule shouldn't be seen as giving CME sole gatekeeping power, though the practical concern was recognised. The Generic Listing Standards would not apply at inception, only at the first reconstitution and rebalance.

Another Committee member said that given the significance of the index and its rules, the Committee should review the detailed rule set and backtested index in greater depth at the next meeting, with a larger audience present, before being asked to resolve on launch. The Administrator agreed and said it would circulate the item again, along with a summary of the proposed rules, ahead of that meeting.

A further Committee member asked how the rules would treat privacy coins and whether such assets would need to trade on eligible venues to be considered. The Administrator confirmed privacy coins would be excluded outright, as would any asset designed to mask its transaction trail, and explained that non-dominant forks would also be excluded since dominant chains tend to accrue value while forks present durability and representativeness risks - this also helps limit replication risk and unnecessary portfolio churn. The Administrator further explained the market-cap-to-total-value-locked filter is meant to screen out assets with high market value but limited evidence of real usage or product-market fit. The same Committee member noted that total value locked can be an imperfect measure due to potential double counting; the Administrator agreed to keep considering the limitations of the metric, while noting the rule may exclude some prominent smart-contract assets with limited usage relative to market cap.

No resolution to launch the index was sought at this meeting. The purpose was to gather the Committee's initial feedback and identify areas needing further explanation or analysis; the Administrator will revert with further detail and circulate the item again ahead of the next meeting.

7 Administrator's update on 2026 Audit

The Administrator informed the Oversight Committee that preparatory work has commenced for the upcoming external audit.

Consistent with the previous audit cycle, the Administrator intends to conduct an Independent Reasonable Assurance Audit covering the firm's control procedures related to compliance with the UK BMR.

8 A.O.B.

There being no further business the meeting was adjourned at 16:03 London Time.