



NCFX Benchmark Statement: NCFX Mid-Rate Indices (NCFX-MI Family of Benchmarks)

NEW CHANGE CURRENCY CONSULTANTS LTD

DOCUMENT AUTHOR:	New Change FX
DOCUMENT OWNER:	New Change FX
STATUS:	Approved
DATE CREATED:	February 2018
VERSION:	3.1
LAST UPDATED:	July 2024

Introduction

This benchmark statement is provided by New Change Currency Consultants Ltd ("New Change FX" or "NCFX" or the "Company") as the administrator of the NCFX-MI Family of Benchmarks and in accordance with Article 27 of Regulation (EU) 2016/1011 of the European Parliament and the Council of 8 June 2016 (the "Benchmark Regulation" or "BMR"). This statement is intended to meet the requirements of the BMR on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds.

On 27 February 2018, HM Treasury in the UK passed into legislation the Financial Services and Markets Act 2000 (Benchmarks) Regulations 2018, thereby fully adopting the BMR (EU) 2016/2011. On that date the Financial Conduct Authority (FCA) in the UK granted NCFX permission under Part 4A of the Financial Services and Markets Act 2000 to carry on the regulated activity of administering a benchmark.

The Benchmark Statement below refers to Article 27 and 28 of the BMR as well as the technical standards (RTS) accompanying the BMR, published in September 2016, and where applicable refers to the specific clause or sub-clause within Articles 27 and 28 of the BMR, or specific Articles and clauses within the RTS relating to disclosure requirements for Benchmark Statements in Section 9.4 of the RTS.

New Change FX can be found on the FCA financial services register with firm reference number 793983. The FCA is the sole regulatory supervisor for New Change FX.

Benchmark Statement

1. General Information:

RTS Section 9.4 Article 7 – Type of Benchmark

- The NCFX-MI Family of Benchmarks qualifies as a Non-significant Benchmark in that it does not satisfy the criteria as either a Critical Benchmark or a Significant Benchmark.
- Benchmark status by currency pair is available on the NCFX website.

BMR Article 27,1,(a) and RTS Section 9.4 Article 1,1 – Rationale and Economic Reality Measured

- NCFX-MI Benchmarks are a family of ex-ante price-based mid-rate benchmarks, both Spot and Forward, in the global FX market.
- The NCFX-MI Benchmarks reflect the calculated mid-rate reality of the live FX markets, aggregated across multiple input FX data feeds, thereby providing clients with an independent assessment of the live FX rate without bias or skew based on their own activity.
- Forward benchmarks on non-standard dates additionally incorporate data feeds reflecting interest rate expectations relevant for selected currencies. These feeds are also aggregations of multiple inputs.
- The NCFX-MI Benchmarks are priced in different currencies, depending on what is being measured. Primary currencies include USD, GBP and EUR.
- All input fx data feeds received are from the top of the marketplaces' books and are available to other market participants to transact business.

BMR Article 27,1,(b) and RTS Section 9.4 Article 1,3 – Discretion Used in Calculation

- Input data must be relevant, timely and fully automated. There is no data submitted from any manual systems.
- Discretion is neither permitted nor possible in creation of the NCFX-MI Benchmarks.
- Creation of the NCFX-MI Family of Benchmarks is fully automated with no human intervention.

2. Methodology and Input Data

BMR Article 27,2,(a),(b) – Definitions and Methodology

- For benchmark spot rates, the mid-price is calculated 20 times per second from the Best Bid and Best Offer price available from the input data feeds at each update period. As each new price is received from any of the feeds (whether a Bid or Offer) New Change FX compares this to all the other prices received at the same time for the given currency pair and the best bid and offer prices are calculated as follows:
 - For Bid prices the highest last received price from the different feeds is taken
 - For Offer prices the lowest last received price from the different feeds is taken

- The mid-rate reflects the average of those two prices
- For generation of benchmarks on forward standard tenors, an algorithm is applied to weigh pricing across incoming data feeds incorporating a quality indicator of the stream, recency of the price, and width of bid / ask spreads. Depending on the currency pair and scenario, the NCFX price recalculates on update of an underlying feed every 1 or every 10 minutes.
- For generation of benchmarks on non-standard dates, New Change FX additionally incorporates data feeds reflecting interest rate expectations relevant for selected currencies.
- The mid-rates are generated from unobtrusive observations of aggregated prices from multiple input FX data feeds that are themselves aggregated which makes it very difficult for market participants to manipulate the rate, as they cannot know whether the prices they are quoting will be included in the formation of the NCFX benchmark mid-rate.
- The methodology has been adopted to deliver a correct, calculated mid-rate for the global FX markets without any manual intervention, or the presence of ex-post trade information in the benchmark. The reason for delivering an independent FX mid-rate is to provide clients, who do not have access to the required technology to calculate such a rate, reasonable access to a measure that has not been and cannot be affected by their own transactions. Regulation such PRIIPs Annex IV, Point 17, require such a rate for calculation of cost. Clients also require such a rate for the settlement of financial contracts where there is no requirement to use the FX markets, such as in fixing the rate for an option expiry.

BMR Article 27,2,(c) – Input Data

- Input FX data is received from ECNs (marketplace digital platforms) that are capable of providing the stream via the FIX market protocol at the required frequency on an automated basis, with no manual input, and where skewed data can be stripped out.
- The currency pair, transaction type (Bid or Offer), price and time stamp is extracted out of the FIX messages in each time window to allow production of the NCFX mid-rate for that window.
- Input FX data is contributed at a rate of up to 1,000 per second depending on the currency (highest frequency for primary currencies).
- Liquidity concerns for less commonly traded currency pairs are crucial and surveillance through the monitoring of the input data feeds is an integral part of the process.
- For forward benchmarks, the mid-rate data is augmented with data feeds reflecting interest rate expectations in order to generate benchmarks on non-standard dates.

3. Limitations and Errors

BMR Article 27,2,(e),(f),(g) and RTS Section 9.4 Article 1,2 – Limitations and Unreliable Data

- Each member of the NCFX-MI Family of Benchmarks requires a minimum of two independent contributing marketplaces in order to be classified as a benchmark.
- For forwards on non-standard dates, interest rate data needs to be available on each side of the currency pair for the pair to be classified as a benchmark.
- New Change FX does not offer NCFX-MI Benchmarks in pairs that exhibit limitations in terms of input data feeds and in the event of circumstances changing adversely for a given member of the family of benchmarks on what appears to be a long-term basis. In those cases, clients would be notified in as far advance as possible, and the benchmark withdrawn.
- The methodology stands up well during periods of market stress, where typically bid-offer spreads widen considerably but the market mid-rate can still be measured reliably on data based on live economic interests across multiple marketplaces.
- Given the fully automated nature of the rate and its calculation, errors are extremely rare. If an error is identified, then the inputs that created the error would be checked to identify the nature of the error. If it is indeed deemed to be a technical error, for example, a rate being quoted to the wrong decimal place, then it would be identified and corrected.

4. Changes and Cessation

BMR Article 27,1,(c),(d), BMR Article 28 and RTS Section 9.4 Article 1,4 – Benchmark Changes or Cessation

- Although considered unlikely, there may be circumstances in or beyond the control of the administrator that would lead to either a change in the methodology or the cessation of the production of the NCFX-MI Family of Benchmarks.
- Changes to the methodology in calculating the NCFX-MI Benchmarks may lead to changes in the financial contracts and financial instruments that are referenced to them.
- Where there is a change of methodology, benchmark users would be given three months' advanced warning where possible.
- Where the administrator is obliged to stop providing a benchmark for whatever reason, benchmark users would be given three months' notice and the administrator would suggest any credible alternative benchmarks where possible.