



NCFX BENCHMARK DEFINITION AND STATEMENT

The following provides a basic definition of the NCFX-MI family of benchmarks:

- NCFX-MI benchmarks are a family of ex-ante price-based midrate benchmarks.
- The NCFX-MI benchmarks reflect the calculated midrate reality of the live FX markets, aggregated across many hundreds of contributions, thereby providing clients with an independent assessment of the live FX rate without bias or skew based on their own activity.
- The NCFX-MI benchmarks are priced in different currencies, depending on what is being measured. Primary currencies include USD, GBP and EUR.
- Input price data is derived automatically from the FX market places connected to NCFX. Rates are delivered many thousands of times a second and the NCFX technology automatically extracts the best bid and offer in a given time window to produce the NCFX midrate for that window.
- Input data is contributed at a rate of up to 1,000 per second depending on the currency (highest frequency for primary currencies).
- Each member of the NCFX-MI family of benchmarks requires a minimum of two independent contributing market places in order to be supplied to clients.
- All input data feeds received are from the top of the contributors' books for 1 million units of the base currency.
- Contributions 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.
- The methodology has been adopted in order to deliver a correct, calculated midrate 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 midrate 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. Requirements such as those under PRIIPs Annex IV, Point 17, require such a rate for calculation of cost, and clients now 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.
- New Change FX does not offer NCFX-MI benchmarks in pairs that exhibit limitations in terms of contributing feeds and in the event of circumstances changing adversely for a given member of the family of benchmarks, then clients would be notified, and the benchmark withdrawn.
- Given the fully automated nature of the rate and its calculation, we have not had an error in 4 years of producing the rate. In the event that an error was identified, then we would check the inputs that created the error and check the nature of the mistake. If the error is deemed to indeed be an error, for example, a rate being quoted to the wrong decimal place, then the error would be corrected.