EXECUTIVE SUMMARY

• BFIX is built on our widely-used BGN composite
• BGN is designed to provide bid ask rates
  • From selection of Bloomberg FX price sources
  • Sources have met criteria including consistency frequency and quality
• BFIX is time-weighted average of BGN, with transparent methodology and is easily replicable.
  • Results are published on the terminal to a dedicated screen BFIX<GO>
  • Selected Rates published on the website (ECB Fixes)
• Sensitivity analysis shows that BFIX is robust to changes in
  1. Unilateral price skewing
  2. Multiple dealers skewing
  3. Dealers halting pricing
  4. These finding are robust across a variety of currencies.
GENERAL CALCULATION FLOW

Dealer Quotes
- Global sourcing
- Covers spot, cross & forward rates
- Dedicated data acquisitions team

Real-time Composite
- Facilitates OTC transparency
- Methodologies vary based on market and liquidity
- Sources anonymized

BFIX
- Generated every 30 mins, published within 15 seconds of the fixing time.
- TWAP methodology
- Replicable, transparent.
BGN OVERVIEW

- **Goals of BGN are:**
  - Find consensus
  - Be Robust

- **Price Inputs are run through a proprietary algorithm**
  - Algorithm generates a market reflective bid ask price for each currency or metals pair
  - Algorithm includes features such as spike detection, age out, crossing prevention
  - Price inputs only considered valid if a bid and ask are contributed.

- **Coverage & History**
  - BGN provides very broad coverage of spot and spot cross rates for currencies and metals
  - FX forward rates including NDF’s.
  - BGN has been available as a price source since 2007
BFIX METHODOLOGY

- Time-weighted average of BGN.
- Computed every 30 minutes, provided BGN frequency conditions are met
- Published within 15 seconds of fixing time to Bloomberg.
- Fully automated process from end to end
- TWAP details:
  - Window can be 5, 10 or 15 minutes, and includes a few seconds after the fixing time
  - 10% of the weight is the BGN value at the fixing time
  - The remaining is linearly weighted:
    - Easily replicable
- BFIX offered as Bid/Ask/Mid
- Rounding methodology
**IOSCO COMPLIANCE**

- **Bloomberg is committed to the Benchmark Business**
  - Recently announced Purchase of Barclays Index Business
- **Currently manages IOSCO compliant benchmarks**
  - Bloomberg Index IN <GO> (FI, Commodity, Currency)
  - FX is an important part of our benchmark ambitions
- **BFIX IOSCO compliance process is in advanced stages**
  - Compliance affirmation expected end Q2
  - External auditors are engaged.

‘Barclays Plc agreed to sell the indexing business built around former Lehman Brothers benchmarks to Bloomberg LP for about 520 million pounds ($781 million),’
DELIVERY MECHANISMS

- BFIX <GO>
- Enterprise delivery mechanisms