

ATTESTATION BY DEUTSCHE BANK GROUP CONFIRMING THE EXTENT OF ITS COMPLIANCE WITH THE IOSCO PRINCIPLES FOR FINANCIAL BENCHMARKS

- 1 The purpose of this document is to disclose publicly the extent to which Deutsche Bank Group (DB or Deutsche Bank) complies with the Principles for Financial Benchmarks (the Principles) set out in the IOSCO Final Report of July 2013 (the IOSCO Report). This attestation is given on behalf of Deutsche Bank Group as a whole.
- 2 The vast majority of DB's benchmark administration business is carried out by Deutsche Bank Index Quant (DBIQ), a function which sits within Deutsche Bank AG's research department. Accordingly, the attestation of compliance with the Principles made by DB in 2014 was made only in respect of DBIQ.
- 3 Subsequently, DB has undertaken an exercise to identify any other benchmark administration activity carried on within the group, which used as its starting point the definition of "benchmark" in the Principles and the EU Benchmark Regulation.
In addition to the benchmark administration business in DBIQ, a relatively small number of reference rates, meeting the definition of benchmark in the Bank's policy (Non-DBIQ Benchmarks), were identified as amounting to administration activity in other divisions of DB, such as the Corporate and Investment Bank (CIB). Asset Management (AM) and Personal & Corporate Banking (PCB).
- 4 For benchmarks within DBIQ, in assessing the extent of compliance with the Principles, DB has taken a proportional approach to implementation as contemplated in the IOSCO Report. DB confirms that, for these benchmarks, it has materially complied with the Principles subject to certain deviations, as summarised in the Annex to this document.
- 5 This attestation of Compliance to the Principles is to be considered valid until superseded by a revised and updated version of the document.
Deutsche Bank will only issue a revised attestation as and when the extent to which the Bank complies with the Principles should differ materially from what described in this document.

2nd January 2018

ANNEX: DEVIATIONS FROM THE PRINCIPLES

Deutsche Bank benchmarks administrated outside DBIQ

- 1 Non-DBIQ Benchmarks are subject to standard controls which DB considers appropriate and proportionate, taking into account their assessed risk level. For these Benchmarks full compliance with the IOSCO principles is not necessarily achieved. In the future Deutsche Bank might consider migrating the administration of certain of these Benchmarks to DBIQ, or their discontinuation.

Principle 2 (Oversight of Third Parties)

- 2 Principle 2 sets out requirements for the oversight by the Administrator of third parties involved in the benchmark determination process and provides that the Administrator should consider adopting policies and procedures to address these requirements. DBIQ makes only very limited use of third parties (specifically Submitters, as described further below) in the benchmark determination process and has identified only a small number of third parties involved in that process.

Submitters

DBIQ only classifies entities which submit data exclusively for use in DBIQ benchmarks which are publicly available and used in public facing products as Submitters. Until recently, DBIQ had identified only a small number of Submitters (as opposed to data providers, who provided data generally but not exclusively for the benchmarks administered by it) involved in the benchmark determination process. These Submitters were fund managers who provided information on asset allocations in relation to a small number of bespoke benchmarks. They did not provide any pricing information. There were contractual arrangements in place between DBIQ and the Submitters which set out specific models and rules to be followed by the Submitters in relation to the submissions they made to DBIQ. DB did not consider it proportionate to renegotiate these, noting that these Submitters may have in any event also owed various other fiduciary and other obligations to the end-users. DBIQ did not monitor the Submitters' exercise of discretion in making the submissions. However any submissions from the fund managers were subject to DBIQ's input data management and controls. These benchmarks have now been retired or converted into private strategies. DBIQ has in place a Submitters' Code of Conduct which did not apply to the Submitters referred to in this paragraph but which will be applied when appropriate to Submitters who may be engaged in the future.

Principle 3 (Conflicts of Interest for Administrators)

- 3 Principle 3(d) requires adequate supervision and sign-off by authorised or qualified employees prior to releasing benchmark determinations. DBIQ relies upon standard automated checks for benchmark determinations prior to release. As such, DBIQ employees do not sign off on each benchmark determination before it is released but only review those determinations that fail to satisfy the automated checks. In view of the nature of the benchmarks operated by it DBIQ does not consider that manual signoff in all cases would materially enhance the quality of determinations. In the exceptional cases where benchmarks are calculated manually, a "four eyes" check is implemented for benchmark determinations.

Principle 5 (Internal Oversight)

- 4 Principle 5 provides that *“Administrators should establish an oversight function to review and provide challenge on all aspects of the Benchmark determination process. This should include consideration of the features and intended, expected or known usage of the Benchmark and the materiality of existing or potential conflicts of interest identified.”* It goes on to state that: *“Where conflicts of interest may arise in the Administrator due to its ownership structures or controlling interests, or due to other activities conducted by any entity owning or controlling the Administrator or by the Administrator or any of its affiliates, the Administrator should establish an independent oversight function which includes a balanced representation of a range of Stakeholders where known, Subscribers and Submitters, which is chosen to counterbalance the relevant conflict of interest.”*
- 5 To this end, Deutsche Bank Group has established:
- An Index Oversight Council (IOC) to provide independent oversight over benchmark determination and distribution by receiving and reviewing periodic reports from management.
 - A Benchmark and Index Control Group (BICG), to design and operate, together with other second line of defence functions, controls around the activities carried out within the Bank related to the administration, submission, and use of Benchmarks.

While certain members of the IOC are drawn from areas of Deutsche Bank Group which utilise the benchmarks in their products, these members are non-voting members and so do not have the ability to decide on issues which are put to the Council. The rest of the IOC membership includes personnel from independent control functions within Deutsche Bank Group such as BICG, Legal and Compliance.

Transparency

- 6 A number of aspects of the Principles require that certain information be published or made available. For example, Principle 9 (Transparency of Benchmark Determination) provides for publication of certain information with each benchmark determination. Depending on how widely the benchmark is used, DBIQ determines what level of transparency is required, the extent to which elements of the calculation methodology should be disclosed, and how the information should be communicated to clients
- Given that most of the proprietary benchmarks produced by DBIQ are bespoke or used by a small number of clients, DBIQ does not always publish the information but instead makes it available to the relevant user(s) on request.

Content of the methodology

- 7 Principle 11 provides a list of minimum requirements that Index Methodologies should contain. DBIQ applied a proportional approach to compliance to this principle, and determines the details disclosed in the methodology based on how widely the benchmark is used.
- Should a client require relevant information not available in the methodology, this will be provided by DBIQ upon request.