EU Benchmark Regulation and IOSCO Principles for Financial Benchmarks

MarketVector Indexes GmbH ("MarketVectorTM")





About MarketVector Indexes GmbH - A VanEck Company

MarketVector IndexesTM develops, monitors and markets the MarketVectorTM Indexes, a focused selection of pure-play and investable Indexes designed to underlie financial products. They cover several asset classes including hard assets and international equity markets as well as fixed income markets. MarketVector IndexesTM is the index business of VanEck, a U.S.-based investment management firm and provider of the VanEck Vectors® ETFs. Many of the products based on MarketVectorTM Indexes are the largest in their investment category. MarketVector IndexesTM also develops and maintains customized Indexes for third parties that aim to track specific investment themes.

Background and Summary

MarketVector Indexes GmbH ("MarketVectorTM") is governed by the European Benchmark Regulation (the "EUBMR") and supports the International Organization of Securities Commissions (IOSCO) "Principles for Financial Benchmarks" (the IOSCO Principles).

MarketVector Indexes[™] has aligned its operations with the key elements from the EUBMR and the IOSCO Principles. Index calculation for all Indexes is separated from index reviews by delegation of index calculation to third parties and in one case (MBVTCO) to the group IT department at VanEck in New York. As MarketVector Indexes[™] is considered a so-called Self-Indexer within the VanEck Group the administration and calculation of its Indexes was always subject to highest transparency and independency standards. All information about the Indexes is freely available for information purposes on www.marketvector.com.

MarketVectorTM Indexes are managed transparently, absolutely rules-based and with lowest level of influence from committees and discretion by management or employees. The index methodology and related index guides and index statements are reviewed periodically. Index administration and calculation is subject to independent oversight and supervision.

A detailed conflicts of interest management including the monitoring of personal trades, outside activity and gifts and entertainment and many further mitigating measures and an outsourcing framework are in place.

MarketVector IndexesTM and its employees are not allowed to manage or issue investment products based upon its Indexes. An independent audit function is established at VanEck Group level that ensures periodic audits of MarketVector IndexesTM with focus on adherence to its policies and procedures and compliance with the relevant regulatory regimes.

The independent Compliance Department at VanEck (Europe) GmbH at Kreuznacher Strasse 30 in 60486 Frankfurt am Main have conducted their comprehensive reviews of MarketVector IndexesTM alignment with the IOSCO Principles and the EUBMR and will continue to conduct ongoing and annual reviews.

This Report has been issued by the Compliance Department at VanEck (Europe) GmbH. The Compliance Department believes that MarketVector IndexesTM is compliant with the EUBMR and the IOSCO Principles



given its understanding of the use of its Indexes and consideration of the nature of the investment products based upon them.

1. Introduction

This Document describes the standards of business conduct, best practice with regard to MarketVectorTM index policies and procedures and specifies the governance and transparency around the production and management of MarketVectorTM Indexes.

2. Control Framework Summary

MarketVector IndexesTM Control Framework has been designed to ensure the proper and sustainable administration and dissemination of its Indexes. The following components belong to the Control Framework and are described in detail in this Organizational Handbook.

- Risk Management Framework,
- Qualified Employees,
- Global policies, procedures and projects framework,
- Index quality and integrity framework.

3. Governance and Organisational Structure

The governance and organizational structure of MarketVector IndexesTM is based on the Advisory Board, the Independent Oversight Function, the Management Board of MarketVector IndexesTM and its employees and their specific participants, roles and responsibilities.

a) Advisory Board

The MarketVector IndexesTM Advisory Board is governed by the Rules of Procedure for the Advisory Board. The Advisory Board is responsible to supervise and advise the Managing Directors of MarketVector IndexesTM. The approval of the Advisory Board is required for certain important decisions.

b) Independent Oversight Function

MarketVector IndexesTM has implemented an Independent Oversight Function ("IOF") that consists of employees of the Legal and Compliance department of VanEck (Europe) GmbH.

Some of the key task and responsibilities of the IOF are:

- Periodic review of the Index Guide and methodology;
- Review and approval of the procedures for index cessation;
- Oversee third parties involved in the provision of the Indexes, including calculation or dissemination agents;
- Assess internal and external audits or reviews, and monitor the implementation of identified remedial actions:
- monitor input data and contributors and MarketVector IndexesTM related actions in challenging or validating contributions of input data.

c) Managing Directors

MarketVector Indexes[™] has two Managing Directors (MD), the Operations and the Shared Services MD. The roles and responsibilities of the two different MDs are documented and serve to ensure mitigation of conflicts of interest and enhance governance standards.



The Managing Directors are responsible for the ongoing review and monitoring of compliance with MarketVector Indexes^{TM'} policies and procedures by all involved parties and the notification of possible breaches or incidents to the IOF.

d) Employees - Roles and Responsibilities

Each MarketVector IndexesTM employee and each VanEck employee has a job description. The job description describes the roles, responsibilities and reporting lines of each employee.

All Employees of MarketVector IndexesTM are obliged to comply with its policies and procedures and to report any possible breaches or incidents to the IOF.

4. Index Methodology Policy

a) Index Guide Determination

MarketVector Indexes[™] has determined robust and reliable index methodologies in the Index Guide for each index or Index Family with clear rules identifying how and when discretion may be exercised for the determination of an index. The Index Guide is rigorous, continuous and capable of validation including, where appropriate, back-testing against available transaction data. It is resilient and ensures that each index can be calculated in the widest set of possible circumstances, without compromising its integrity and is traceable and verifiable.

MarketVector[™] Index Guide takes into account factors including the size and normal liquidity of the market, the transparency of trading and the positions of market participants, market concentration, market dynamics, and the adequacy of any sample to represent the market or economic reality that the index is intended to measure. It further determines what constitutes an active market ("Universe") for the purposes of each index and establishes the priority given to different types of input data.

b) Index Guide Publication and Dissemination

MarketVector IndexesTM publishes Index Guide and related data on its Website and where necessary and agreed under index licensing agreements or data licensing agreements provide the index data as agreed to the relevant recipients.

c) Index Guide Review

MarketVector IndexesTM reviews the Index Guide and the related index methodology on an annual basis and present a review report to the IOF. MarketVector IndexesTM reviews all index definitions and methodologies at least annually.

d) Index Guide Changes

Index Guide changes are subject to a detailed index change review process. The process describes the involved parties and different processes depending on the materiality of the Index Guide Change. In case of material changes MarketVector IndexesTM disseminates an advance notice to users 60 days prior to the change. A shorter period of time is applied at MarketVector IndexesTM discretion if the relevant index has not been licensed to a third party.

5. Input Data Policy



a) Input Data Quality Requirements

MarketVector IndexesTM has a detailed Input Data Policy which describes the requirements with regard to the input data used for the management and provision of an index and the relevant input data providers ("Contributors"). Some of the key elements and requirements under this policy are:

- the input data shall be sufficient to represent accurately and reliably the market or economic reality that the benchmark is intended to measure;
- the input data shall be transaction data, if available and appropriate;
- in case an index is based on input data from Contributors, MarketVector IndexesTM will obtain, where appropriate, the input data from a reliable and representative panel or sample of Contributors.

b) Input Data Quality Controls

MarketVector IndexesTM controls the quality of input data through an evaluation of market share, reputation, quality and cost of possible input data sources and providers before selecting them. In certain cases, MarketVector IndexesTM compares the input date of one Contributor with the input data from one or more other Contributors in order to ensure the integrity and accuracy of the input data. In case of insufficient quality of input data MarketVector IndexesTM replaces Contributors.

c) Mitigating Measures

If MarketVector IndexesTM considers that the input data does not represent the market or economic reality that an index is intended to measure or if it identifies circumstances in which the quantity or quality of input date falls below the standards necessary for the index methodology to determine an index accurately and reliable, it will either change the input data, the Contributors or the Index Guide and index methodology in order to ensure that the input data does represent such market or economic reality, or cease to provide that index. The selected measure will be executed and published within a reasonable time period.

6. Index Cessation

MarketVector IndexesTM has robust procedures for the cessation of an index. Roles and responsibilities, single steps and notification periods are defined in the procedure.

7. Outsourcing - Vendor Management

MarketVector Indexes[™] has implemented a Vendor Management Policy to organize a formal review, due diligence, onboarding and monitoring process to follow with regards to all of its vendors. The policy is designed to be a road map to evaluate vendor risk in all stages of the relationship.

8. Conflict of Interest Review

As one of the core managerial and organizational measure to identify, manage and mitigate conflicts MarketVector IndexesTM conducts an annual conflict of interest review. The result of this review is being summarized in a schedule of Conflicts of Interest.

If this is reasonably required to protect the integrity and independence of the relevant index MarketVector IndexesTM defines mitigating procedures, strategies and/or measures. The key element of the mitigation factors are as follows:

MarketVector Indexes[™] publishes in the public domain, including on its Website the rules that govern the construction and maintenance of each of the underlying Indexes.

The rules-based process could be modified for example to reflect changes in the underlying market tracked by an underlying index , the way in which the rules-based process takes into account market



events or to change the way a corporate action, such as a stock split, is handled. Such changes would not take effect until MarketVector IndexesTM has given the relevant calculation agent reasonable written notice of such rule changes, and the investing public at least sixty (60) days published notice that such changes will be implemented.

Furthermore, each underlying index will be reconstituted or rebalanced on at least an annual basis but not more frequently than monthly.

The calculation of the underlying Indexes has been delegated to independent (non-affiliated) calculation agents.

MarketVector Indexes[™] will consider the conflict of interest for any discretionary decision related to the index management, review and dissemination and will particularly ensure that interest of users, investors in related products and the integrity of the market will be reasonably considered in a balanced and healthy way. In case of doubts the relevant situation will be discussed and reviewed with the Independent Oversight Function.

MarketVector Indexes[™] publishes or discloses all existing or potential conflicts of interest to users of a benchmark, to the relevant competent authority and, where relevant, to contributors, including conflicts of interest arising from the ownership or control of the administrator.

9. Outside Business Activity Policy

MarketVector IndexesTM does apply an Outside Business Activities Policy and Procedure in order to manage that no employee has interests or business connections that compromise MarketVector IndexesTM activities related to the provision of benchmarks.

10. Personal Securities Transaction Policy

MarketVector IndexesTM applies a Personal Securities Transaction Policy. MarketVector IndexesTM employees are prohibited from contributing to a benchmark determination by way of engaging in bids, offers and trades on a personal basis or on behalf of market participants, except where such way of contribution is explicitly required as part of the Index Guide or index methodology and is subject to specific rules therein.

11. Gifts and Entertainment Policy

MarketVector Indexes[™] applies a market standard Gifts and Entertainment Policy and has reasonable procedures in place to manage this policy.

12. Confidentiality Policy

MarketVector Indexes^{TM'} employees are subject to effective procedures to control the exchange of information with other employees or with third parties involved in activities that may create a risk or conflicts of interest, where that information may affect the benchmark.

13. Audit and Reporting

The IOF, the Compliance Department and the Risk Department reasonably monitor the compliance of MarketVector IndexesTM with all applicable policies, procedures, rules and regulations including the OFAC Principles. The audits are proportional to the size and complexity of MarketVector IndexesTM business.

14. Human Resources Management

a) Employees Personal and Technical Skills



MarketVector Indexes[™] has a strong focus and interest in the personal and technical skills of its employees and service providers who are involved in the provision of a benchmark. The number of MarketVector Indexes[™] employees allows an efficient management owned process and oversight that ensures that all employees have the necessary skills, knowledge and experience for the duties assigned to them.

b) Compensation Review Policy

The direct reporting line of all employees to the management mitigates the risk of undue influence or conflicts of interest. The compensation and performance evaluation of all employees is subject to a second review by the shared services manager in order to mitigate possible related conflicts and ensure the integrity of the benchmark determination process.

15. IT Set-up

MarketVector Indexes™ IT set-up is governed by a Help Desk Process Policy. The policy describes the IT environment, IT support coverage, emergency procedures and business continuity measures and the related roles and responsibilities.

16. Record Keeping Policy

MarketVector IndexesTM keeps records of all relevant and important information and documents. A schedule of documents, correspondence and information/data that needs to be archived is contained in the Record Keeping Policy.

MarketVector IndexesTM keeps records for at least five years in such a form that it is possible to replicate and fully understand the determination of an index. Communication between any person employed by the administrator and contributors or submitters in respect of an index are kept for a period of three years.

17. Business Continuity Plan

MarketVector Indexes[™] has established a Business Continuity Plan (BCP) that covers the development, the management of the quarterly reviews of the Indexes, the management of the Index Guide and other related index research or competitive analysis.

18. Complaints Handling

MarketVector IndexesTM has implemented a Complaints Handling Procedure in order to ensure that complaints are dealt with promptly and resolved as quickly as possible.