

Type:	Policy
Reference number:	201907-08
Subject:	Determination and Dissemination
Scope:	STOXX Benchmarks
Approved by:	Management Board ("MB")
Approval date:	July 2019
Responsible department:	Operations
Relevant documents:	Terms of Reference – Index Operations Committee ("IOC") Terms of Reference – Index Management Committee ("IMC") Terms of Reference – Index Governance Committee ("IGC") Terms of Reference – Oversight Committee ("OC") Terms of Reference – MB
Valid from:	Date of STOXX Recognition within the meaning of art. 32 Regulation (EU) 2016/1011
Valid until:	Revocation
Version (Updated):	2.0

1 Background

The regulations of benchmarks in the various jurisdictions and for the various types of regulated entities vary in detail, but the general approach is equivalent in principle. In addition, the various rules and regulations use different language and terminology while content wise being very similar. As such, this Policy uses a harmonized language, which is to be read in conjunction with the specific (national) legal terminology. The most relevant parts of the legislative framework applicable can be summarized as follows:

- Global:

Administrators of benchmarks need to comply with requirements of Principle 1 (Overall responsibility of the Administrator) and Principle 9 (Transparency of Benchmark Determinations) of the IOSCO Principles for Financial Benchmarks FR07/13.

- European Union:

Administrators of benchmarks used in the EU need to comply with the requirements of the Regulation (EU) No. 2016/1011 "EU Benchmark Regulation" or "EU BMR".

- United Kingdom¹:

Administrators of benchmarks used in the UK need to comply with the requirements of Section 3(1) European Union (Withdrawal) Act 2018 (UK) in conjunction with EU BMR ("UK BMR").

2 Objective and Purpose²

The Policy addresses the requirements with respect to the design of benchmarks administered by STOXX Ltd., Zug, Switzerland ("STOXX").

3 Scope

¹ According to current status UK BMR will only become effective in the event of a no-deal Brexit.

² Cases or situations not covered by this policy will be covered by processes in the respective STOXX or DAX Index Guides.

This Policy applies to all benchmarks STOXX administers within the meaning of Art. 3 (1), (5) and (6) EU BMR and any similar or equivalent regime ("STOXX Benchmarks").

4 Benchmark Determination

4.1 Responsibilities

Benchmark determination encompasses the collection, analysis and processing of underlying information and data, as well as the determination of a benchmark through the application of a formula or through another method of calculating any information provided for that purpose.

Operations is responsible for the benchmark determination. The frequency of a benchmark determination depends on the nature and rules of the benchmark. Product Development ("PD") must ensure that published benchmark methodologies ("Index Guides") contain information on the benchmark determination process, including its frequency. Operations has the responsibility of notifying PD if it identifies incorrect or incomplete information in the Index Guides.

The following teams in Operations are responsible for accurate and timely benchmark determination:

Team	Responsibility
Index Surveillance & Monitoring	Ongoing monitoring and maintenance of a benchmark (real-time data and end-of-day data)
Corporate Actions	Research, verification and implementation of corporate actions
Index Review	Periodic review of a benchmark composition and weights

As part of the benchmark determination process, Operations is responsible for performing and documenting the following tasks (non-exhaustive list):

- Application of benchmark methodology;
- Application of standard corporate actions, as per benchmark rules;
- Evaluation of complex corporate actions and the impact on the overall market or customers, as well as other stakeholders³
- Periodic benchmark reviews as per benchmark rules;
- Evaluation of special cases (e.g. hedging or long-tracking impossible) not covered by benchmark rules and impact on the overall market or customers, as well as other stakeholders;
- Monitoring of services outsourced to third parties and evaluation of third party service quality;
- Monitoring of suitability of benchmarks and assessment of representativeness of underlying interest it seeks to measure;
- Preparing assessment of calculation errors and of other issues which influence benchmark accuracy and suggest potential mitigating actions;
- Monitoring of operational risks, including proposals to implement new controls or to change existing controls to address operational risks;
- Implementation of measures to monitor and challenge input data (including submissions) and implementation of measures to detect potential anomalous or suspicious input data or submissions.

4.2 Escalation

Whenever Operations determines that it is unable to perform any of its tasks covered by this Policy, it shall escalate the issue to the IOC in accordance with its terms of reference. In order to enable the IOC to properly evaluate the issue, Operations must document and assess the issue and decide upon necessary

³ A Stakeholder means (a) persons or entities that purchase benchmark determination services from STOXX/DBAG regarding a benchmark administered by STOXX and/or (b) persons or entities who have an index license with STOXX/DBAG regarding a benchmark administered by STOXX (Subscriber) and/or as far as STOXX is reasonable aware (c) persons or entities and/or third parties who own contracts or financial instruments that reference a benchmark administered by STOXX.

actions. IOC has the responsibility to assess and evaluate the issue and decide upon any further escalation to the IMC or IGC. The OC receives information on business activities, results of reviews and decisions (ex-post oversight) in order to oversee the administrator's control framework, the management and operation of the benchmark, and, where the benchmark is based on input data from contributors, the code of conduct referred to in the EU BMR and and/or any similar or equivalent regime.

5 Review by the Index Review Team

In the course of the quarterly review process, the Index Review team must evaluate whether the construction of a benchmark is still possible. Depending on the characteristics of a benchmark, the following factors (where applicable) should be considered:

- Turnover in the benchmark (absolute/relative number of companies leaving/entering a benchmark);
- Number of companies in the universe, selection list or the benchmark;
- Major changes in data availability and data quality; and
- The application and execution of the benchmark methodology (the universe, selection and weighting rules).

Any issues that surpass typical trouble-shooting and prevent the application and execution of the existing benchmark methodology must be escalated, depending on severity, as follows (in parallel to PD being informed):

1. Index Analyst and the PD Manager;
2. Head of Index Reviews;
3. Head of Operations; and
4. IOC.

6 Benchmark Dissemination

Operations will produce a concise explanation of the extent to which and the basis upon which expert judgment⁴, if any, was used in establishing a benchmark determination, this could lead to an IOC in accordance with the IOC terms of reference.

For benchmarks that are derived from data sourced from regulated markets or exchanges with mandatory post-trade transparency requirements, as well as for benchmarks that are based exclusively on executable quotes, the above information must be clearly described, and such description must be disclosed in the Index Guide of the respective benchmark. For all other benchmarks (such as those based on contributions or where STOXX uses its expert judgment) the above information must be published with regards to each benchmark determination only where such benchmark determination deviates from the benchmark methodology.

Furthermore, Operations is responsible for the timely and accurate preparation and publication of the following information (depending on the confidentiality of the data, some of the data may only be accessible for customers):

⁴ Expert judgment' means the exercise of discretion by an administrator or a contributor with respect to the use of data in determining a benchmark, including extrapolating values from prior or related transactions, adjusting values for factors that might influence the quality of data such as market events or impairment of a buyer or seller's quality, and weighting firm bids or offers greater than a particular concluded transactions (EU BMR Article 3(1)(13)) and/or any similar or equivalent regime.

Document	Content Description	Frequency
Daily Composition Lists	Daily reference data and components, weights, prices, corporate actions and adjusted opening and closing prices, etc.	D
Daily Historical Values Files	Daily historical data and components, weights, prices, corporate actions and adjusted opening prices, etc.	D
Daily Index Divisor Files	Daily benchmark close, market capitalization changes, divisor changes, benchmark point changes.	D
Monthly Fundamental Data Reports (for selected benchmarks)	Statistics including dividend yield.	M
Pre-/Selection lists	Lists of current benchmark members and eligible replacements in case of deletion of a member from a benchmark with fixed number of components.	M/Q/A
Review Files - component announcement/underlying data announcement	Provisional new compositions after regular review process.	Q/SA/A
Factsheets (for selected benchmarks)	Short presentation of benchmark construction, purpose and performance values.	M
Upcoming Corporate Actions/Dividend Forecast	List of Corporate Actions/Dividends identified for the next 90 days.	Twice a day/Ah

D = Daily, M = Monthly, Q = Quarterly, SA = Semi-Annually, A = Annually, Ah = Ad hoc

7 Reports

The following reports must be prepared by the responsible department in relation to this Policy and submitted to relevant committee as detailed in relevant Terms of Reference.

Document	Content Description	Frequency	Responsible unit
Risks and incidents	Comprehensive overview and assessment of benchmark related risks (I) and summary of incidents including an analysis of major root-causes (II)	M	Operations
Exercise of expert judgment	Comprehensive summary/overview of exercise of expert judgment as detailed in the monitoring tool	Q	Operations
Periodic (methodology) reviews	Comprehensive summary/overview of all performed methodology reviews.	A	PD

Document	Content Description	Frequency	Responsible unit
Controls report	E.g. according to ISAE 3402 standard.	A	Compliance
STOXX's annual audit report	E.g. STOXX's IOSCO Audit Report	A	Compliance

D = Daily, M = Monthly, Q = Quarterly, SA = Semi-Annually, A = Annually, Ah = Ad hoc

8 Review Process

This Policy will be reviewed in accordance with the Policy Management Policy and updated as necessary. The responsibility for the updates is assumed by the Head of Operations.