

# Guide to the RX Real Estate Equity Indices

Formerly known as Guide to the Real  
Estate Indices of Deutsche Börse AG

Version 2.2

October 2019

## **General Information**

With effect to August 2019 Deutsche Börse AG has transferred the administration of the DAX Equity Indices formerly known as the Equity Indices of Deutsche Börse AG to its affiliate STOXX Ltd.

STOXX Ltd. develops, creates and calculates markets and publishes indices for certain usages, e.g., the issuance of Financial Instruments. In general, an Index is any figure published or made available to the public that is regularly determined by the application of a formula (or any other method of calculation, or by an assessment) on the basis of the value of one or more underlying assets or prices, including estimated prices, actual or estimated interest rates, quotes and committed quotes, or other values or survey.

All RX Real Estate Equity Indices are governed by the respective index methodology applicable to the respective index or index family. Purpose of this Guide to the RX Real Estate Equity Indices ("Guide") is to provide for a comprehensible index methodology in continuity of the former Guide to the RX Real Estate Equity Indices of Deutsche Börse AG as last amended with effect from April 2016 (version 1.2).

In order to ensure the highest quality of each of its indices, STOXX Ltd. exercises the greatest care when compiling and calculating equity indices on the basis of the rules set out in this Guide.

However, STOXX Ltd. cannot guarantee that the various indices, or the various ratios that are required for index compilation and computation purposes, as set out in this Guide, are always calculated free of errors. STOXX Ltd. accepts no liability for any direct or indirect losses arising from any incorrect calculation of such indices or ratios.

The RX Real Estate Equity Indices in no way represent a recommendation for investment. In particular, the compilation and calculation of the various indices shall not be construed as a recommendation of STOXX Ltd. to buy or sell individual securities, or the basket of securities underlying a given index.

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### **History of Amendments to the Rules and Regulations**

All amendments listed with effect prior to August 2019 are amendments to the Rules and Regulations of the former Real Estate Indices of Deutsche Börse AG.

Amendments listed as of August 2019 are amendments to the Rules and Regulations of the RX Real Estate Equity Indices, administered by STOXX Ltd, are in continuation of the Rules and Regulations of the former RX Real Estate Indices of Deutsche Börse AG.

October 2019	Version 2.2 Clarifications relating to EU Benchmark Regulation
August 2019	Version 2.0 Clarification relating to EU Benchmark Regulation and changes relating to the transfer of index administration to STOXX Ltd.
April 2016	Version 1.2 Edit of wording for the index-specific deviation threshold from one index ticker to another
December 2014	Version 1.1 Clarification of the rulebook according to IOSCO principles
November 2007	Initial version 1.0

CDAX<sup>®</sup>, Classic All Share<sup>®</sup>, DAX<sup>®</sup>, Eurex<sup>®</sup>, FDAX<sup>®</sup>, FWB<sup>®</sup> Frankfurter Wertpapierbörse, HDAX<sup>®</sup>, MDAX<sup>®</sup>, ODAX<sup>®</sup>, SDAX<sup>®</sup>, TecDAX<sup>®</sup>, Xetra<sup>®</sup>, X-DAX<sup>®</sup>, X-MDAX<sup>®</sup>, X-TecDAX<sup>®</sup> and XTF<sup>®</sup> Exchange Traded Funds are registered trademarks of Deutsche Börse Beteiligungen GmbH.

## 1 Introduction

### 1.1 Discretion

Save for the cases expressly described in this Guide, the index methodology is entirely rule-based and automatic. Discretion only applies if expressly stated and must be exercised as provided for in this Guide.

#### 1.1.1 Exercise of Discretion

Discretion may only be exercised with a view to resolve issues arising in maintaining the prevailing index methodology in response to unanticipated events, with an overarching aim to accurately and reliably measuring the market or economic realities as defined in this Guide.

In accordance with BMR, discretion shall be exercised in line with the following principles:

- The body or person(s) exercising discretion must not be affected by a conflict of interest;
- The body or person(s) exercising discretion must have the requisite skills, knowledge and experience to exercise such discretion;
- All facts and circumstances relevant for the exercise of discretion must have been established and properly documented prior to the exercise of discretion;
- The exercise of discretion must comply with all applicable laws and regulations;
- The body or person(s) exercising discretion must act on the basis of only the relevant facts and circumstances, must give proper weight to the various considerations taken into account, and must ignore irrelevant facts and circumstances;
- The body or person(s) exercising discretion must act with a view to maintain the integrity of the market or economic reality; and
- The body or person(s) exercising discretion must act honestly, reasonably, impartially and in good faith.

**Discretionary Rule:** *Any exercise of discretion must take into account the rationale of the index, the purpose of the rules with regard to which discretion is exercised, the objective to preserve market integrity and reliability of the index calculation to avoid undue market impact, the technical feasibility and economic reasonableness, and the interest of licensees or investors.*

The cases in which STOXX Ltd. may exercise discretion with regard to the index methodology and its application are noted in the respective rules of this Guide.

The following bodies are involved in the decision-making process relevant for the indices governed by this Guide:

- Product Initiation Committee (PIC),
- Product Approval Committee (PAC),
- Index Operations Committee (IOC),
- Index Management Committee (IMC),
- Index Governance Committee (IGC),
- Oversight Committee (OC),
- Management Board (MB).

The following table summarizes the cases in which STOXX Ltd. Committee(s) may exercise discretion with regard to the index methodology and its application:

Case	Responsible STOXX Committee
Index Termination	IMC, IGC
Sector Affiliation	IMC, IGC
Exclusion from Rankings	IGC

Deviation from Fast Exit/Fast Entry rules and Regular Exit/Regular Entry rules in exceptional cases	IGC
Procedure in case if a breach of the Basic Criteria	IGC
Non-rule based Correction	IOC, IMC, IGC
Deviation from notification procedure regarding Calculation Errors	IOC, IMC, IGC
Determination of expected price to new shares in case of Subscription Rights on Other Share Classes	IGC
Procedure for Subscription Rights on Instruments with Embedded Options	IGC
Limitations	IGC
Annual methodology review schedule	IMC, IGC
Initiation of ad hoc methodology reviews	IMC
Determination regarding materiality of changes to the index methodology	IMC
Deviation from standard consultation period in case of material changes of the index methodology	IGC
Decision whether material change shall become effective	IGC
Decision to conduct another consultation in case of material changes of the index methodology	IGC, OC
Deviation from notification procedure in case of material changes of the index methodology	IGC
Deviations from notification procedure in case of non-material changes of the index methodology	IMC

## 1.2 Index Termination Policy

For the termination of an index or an index family for which outstanding products are present in the market, to the knowledge of STOXX Ltd., a market consultation will be initiated by STOXX Ltd. to take into account market participants' views and concerns related to the termination. The length of the consultation period will vary based on the



specific issues of each proposed termination (Discretionary Rule, see Section 1.1.1). During the term of the consultation period, clients have the chance to share their concern regarding the termination. Based on the collected feedback, STOXX Ltd. may rethink its decision to terminate and index or an index family (Discretionary Rule, see Section 1.1.1). At the end of the consultation period, STOXX Ltd. will publicly announce its final decision about the termination. A transition period will be granted (Discretionary Rule, see Section 1.1.1)

For the termination of an index or index family for which, to the knowledge of STOXX Ltd., there are no listed financial products issued in the market, no market consultation will be conducted.

## 2 General Index Information

### 2.1 Index Composition

The index composition of RX indices is updated regularly. Stoxx Ltd. decides on the index composition with respect to the following criteria

### 2.2 RX REIT All Share Index

RX REIT All Share Index comprises any of the shares listed in the REIT segment as far as these shares are also listed in Prime- or General Standard. REITs, which are listed on the open market, are excluded from the index. The German REITs as well as the foreign REITs might be eligible for RX REIT All Share Index.

The necessary prerequisites for the inclusion in the index are provided by REIT status, which is conferred from the respective country, and the listing in the REIT segment of the Frankfurt Stock Exchange.

Changes in the composition of the relevant segment, ensuing from new listings, deletions, mergers, etc., are therefore directly reflected in the index. RX REIT All Share is not restricted to a certain number of issues. Hence, it measures the performance of the entire REIT segment.

#### 2.2.1 New Listings and Deletions

In the following we differentiate different scenarios:

1. REIT IPO: a REIT company is listed in Prime or General Standard for the first time (with simultaneous inclusion in REIT segment of the Frankfurt Stock Exchange). The Inclusion of the new company into the index is carried out on the second trading day.
2. REIT changes to Prime or General Standard and was previously listed in open market: The Inclusion of the company into the index is treated as IPO and carried out on the second trading day.
3. Inclusion of a REIT or change of company type into REIT, which is already listed in Prime or General Standard, in REIT segment (however, REIT was not listed in REIT segment). The Inclusion into the index is carried out on the first day of trading in the REIT segment.

After a new listing or deletion has occurred, a chaining factor is calculated in line with the quarterly chaining process in order to avoid a gap in the index, however, without adjusting the number of shares or the free float and  $c_{it}$  factors.

### 2.2.2 Merger of Companies

Companies which have been taken over are deleted immediately after their delisting, with the index to be chained accordingly. The capital of the company which has taken over remains unchanged. The  $q_{it}$  and  $ff_{it}$  factors of the latter are subject to adjustment on the next regular chaining date, with no change to the  $q_{i0}$  factor.

In cases where the new shares do not constitute the continued quotation of one of the original companies, they are included in the index as a completely new issue; the current capital of which is reflected by  $q_{i0}$ . The index is also chained accordingly.

## 2.3 RX REIT Index

RX REIT Index comprises up to 20 REITs from REIT segment which are listed in Prime Standard. The high level of transparency standards for the listing in Prime Standard provides a necessary prerequisite for the inclusion in RX REIT Index.

### 2.3.1 Selection Criteria

To be included or to remain in a selection index, companies have to satisfy certain prerequisites. All classes of shares must

- be listed in the Prime Standard segment
- be traded continuously on Xetra® and
- belong to the REIT segment of the FWB® Frankfurt Stock Exchange

Moreover, foreign REITs must:

- have their focus of trading volume on Xetra® (see Guide to the DAX Equity Indices).
- having a major share of the stock exchange turnover at the FWB® Frankfurt Stock Exchange or at the Frankfurt floor trading

With the respective prerequisites being satisfied, component issues are selected for the RX REIT Index according to the following criteria:

- Order book turnover on Xetra® (within the preceding twelve months)
- Free float market capitalization as at a certain reporting date (last trading day of each month).

The free float market capitalization is determined using the average of the volume-weighted average price and the free float factor as determined according to rules outlined in the Guide to the DAX Equity Indices.

### 2.3.2 Application of the Selection Criteria

The selection of companies for the RX REIT Index is based on two quantitative criteria: exchange turnover and market capitalization.

#### Ordinary Adjustment

Whenever, less than 20 REITs are eligible for the index all qualifying issues will be included. For the inclusion dates compare chapter 2.2.1.

Whenever, more than 20 issues are eligible for the index the selection will be carried out according to the following criteria:

A new company outside the index is included if it ranks no. 18 or better in both criteria (market capitalization and exchange turnover), provided there is an index value ranking worse than 22 in one criterion.

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The ordinary adjustment takes place on a quarterly basis.

#### 2.3.2.1 Extraordinary Adjustments

Extraordinary adjustments to index composition have to be performed, regardless the ordinary adjustments, upon occurrence of specific events such as cancellation of the REIT status, insolvency etc.

Whereby:

- Companies for which insolvency proceedings are rejected for lack of assets, or which are currently in liquidation, are immediately removed from the corresponding selection indices.
- In contrast, companies that have filed an application for the opening of insolvency proceedings are only removed from the selection indices in the course of the next quarterly review of the index composition. This also holds true once the insolvency proceedings begin.
- REITs, which have lost their REITs status, are immediately removed from the selection index
- Companies no longer meeting the basis criteria necessary in order to remain in the index, e.g. regarding the Prime Standard listing or continuous trading are removed from the index insofar as STOXX Ltd. becomes aware of this. STOXX Ltd. communicates this decision and replaces the relevant company, usually two full trading days after the announcement (Discretionary Rule, see Section 4.6). In justified cases (e.g. in the event of the inclusion of the acquiring company in the index), the replacement can be delayed by up to ten trading days (Discretionary Rule, see Section 4.6). Where non-compliance with these rules on a future date is already certain, the relevant company may be replaced as early as on the next chaining date (Discretionary Rule, see Section 1.3).
- In case of mergers and acquisitions companies are immediately removed from the corresponding selection indices without replacement.

## 2.4 RX Real Estate Index

The RX Real Estate Index contains up to 30 constituents from the DAXsubsector Real Estate.

### 2.4.1 Selection Criteria

To be included or to remain in a selection index, companies must have at least 1 m. average daily trading volume. All classes of shares must:

- be listed in the Prime Standard segment
- be traded continuously on Xetra® and
- must be classified as a real estate companies (DAXsubsector Real Estate) according to the sector classification system as described in Guide to the DAX Equity Indices

Moreover, foreign real estate companies must:

- have their focus of trading volume on Xetra® (see Guide to the DAX Equity Indices).
- have a major share of the stock exchange turnover at the FWB® Frankfurt Stock Exchange or at the Frankfurt floor trading

With the respective prerequisites being satisfied, the top 30 component issues are selected for the RX Real Estate Index according to the order book turnover on Xetra® (within the preceding twelve months).

### 2.4.2 Ordinary Adjustment

Regular modifications to the index composition only occur every three months, on the respective chaining date. All companies that fulfill the prerequisites and have a minimum average daily trading volume of 1mn are ranked according to 12-months order book turnover in descending order.

Whenever, less than 30 components are eligible for the index all qualifying issues will be included.

Whenever, more than 30 issues are eligible for the index the selection will be carried out according to the following criteria:

All companies with rank 30 or lower constitute the new index composition. Therefore, if a current component ranks 31 or higher it will be removed from the index at review. If a non-component ranks 30 or lower, it will be added to the index at quarterly index review.

#### 2.4.2.1 Extraordinary Adjustments

Extraordinary adjustments to index composition must be performed, regardless the ordinary adjustments, upon occurrence of specific events such as cancellation of the REIT status, insolvency etc.

Whereby:

- Companies for which insolvency proceedings are rejected for lack of assets, or which are currently in liquidation, are immediately removed from the corresponding selection indices.
- In contrast, companies that have filed an application for the opening of insolvency proceedings are only removed from the selection indices in the course of the next quarterly review of the index composition. This also holds true once the insolvency proceedings begin.
- REITs, which have lost their REITs status, are immediately removed from the selection index
- Companies no longer meeting the basis criteria necessary in order to remain in the index, e.g. regarding the Prime Standard listing or continuous trading are removed from the index insofar as STOXX Ltd. becomes aware of this. STOXX Ltd. communicates this decision and replaces the relevant company, usually two full trading days after the announcement (Discretionary Rule, see Section 4.6). In justified cases (e.g. in the event of the inclusion of the acquiring company in the index), the replacement can be delayed by up to ten trading days (Discretionary Rule, see Section 4.6). Where non-compliance with these rules on a future date is already certain, the relevant company may be replaced as early as on the next chaining date (Discretionary Rule, see Section 1.3).
- In case of mergers and acquisitions companies are immediately removed from the corresponding selection indices without replacement.

## 3 Calculation

### 3.1 Index Formula

The indices of RX Real Estate index family are conceived according to the Laspeyres formula set out below:

$$\text{Index}_t = K_T \cdot \frac{\sum_{i=1}^n p_{it} \cdot q_{iT} \cdot ff_{iT} \cdot c_{it}}{\sum_{i=1}^n p_{i0} \cdot q_{i0}} \cdot \text{Base}$$

whereby:

- $c_{it}$  = Adjustment factor of company  $i$  at time  $t$
- $ff_{iT}$  = Free-float-factor of share class  $i$  at time  $T$  (determined according to the rules outlined in the Guide to the DAX Equity indices)
- $n$  = Number of shares in the index
- $p_{i0}$  = Closing price of share  $i$  on the trading day before the first inclusion in the index
- $p_{it}$  = Price of share  $i$  at time  $t$
- $q_{i0}$  = Number of shares of company  $i$  on the trading day before the first inclusion in the index
- $q_{iT}$  = Number of shares of company  $i$  at time  $T$
- $t$  = Calculation time of the index
- $K_T$  = Index-specific chaining factor valid as of chaining date  $T$
- $T$  = Date of the last chaining

The formula set out below is equivalent in analytic terms, but designed to achieve relative weightings:

$$\text{Index}_t = \frac{\sum_{i=1}^n p_{it} \cdot (K_T \cdot \frac{ff_{iT} \cdot q_{iT}}{\sum_{i=1}^n q_{i0}} \cdot 100 \cdot c_{it})}{\sum_{i=1}^n p_{i0} \cdot \frac{q_{i0}}{\sum_{i=1}^n q_{i0}} \cdot 100} \cdot \text{Base} = \frac{\sum_{i=1}^n p_{it} \cdot F_i}{A} \cdot \text{Base}$$

whereby:

$$A = \frac{\sum_{i=1}^n p_{i0} \cdot q_{i0} \cdot 100}{\sum_{i=1}^n q_{i0}}$$

and:

$$F_i = K_T \cdot \frac{ff_{iT} \cdot q_{iT}}{\sum_{i=1}^n q_{i0}} \cdot 100 \cdot c_{it}$$

Index calculation can be reproduced in simplified terms by using the expression  $F_i$ :

- Multiply the current price by the respective  $F_i$  weighting factor;
- Take the sum of these products; and
- Divide this by the base value (A) which remains constant until a modification in the index composition occurs.

The  $F_i$  factors provide information on the number of shares required from each company to track the underlying index portfolio.

### 3.1.1 Prices Used and Calculation Frequency

Index calculation is performed on every trading day of FWB® Frankfurt Stock Exchange, using prices traded on Deutsche Börse's electronic trading system Xetra®, whereby the last determined prices are used. The RX Real Estate indices use the values of the constituent elements (applying currency conversion, if necessary) in calculation its index value and is expressed in Index points, reflecting the index-specific currency. The indices are available in the currencies set forth in the Vendor Code Sheet which is available on the DAX website [www.dax-indices.com/resources](http://www.dax-indices.com/resources). The intraday currency conversion is based on the spot rates provided by Refinitiv. The currency fixing rates from 5:00 pm CET are used to calculate the indices' closing values.

#### RX REIT Index ,RX Real Estate Index and RX REIT All Share Index

As performance indices the RX REIT Index, the RX Real Estate Index and the RX REIT All Share Index are calculated continuously once a minute from 9.00 a.m. to 5.45



p.m. The computation of the respective price indices is also carried out continuously once a minute from 9.00 a.m. to 5.45 p.m..

A daily settlement price is calculated once a day for each index involved (on the basis of intra-day midday auction prices) as soon as all prices for the component issues of the respective index are available. As long as opening prices for individual shares are not available, the particular closing prices of the previous day are taken instead of calculating the indices.

In the event of a suspension during trading hours, the last price determined before such a suspension is used for all subsequent computations. If such suspension occurs before the start of trading, the closing price of the previous day is used instead. The closing index level is calculated using the respective closing prices (or last prices) established on Xetra®.

## 3.2 Computational Accuracy

The  $K_T$  chaining factors are used and published as figures rounded to seven decimal places.

The  $c_{it}$  adjustment factors are included in the index formula, expressed in six decimal places. In the event of several adjustment events coinciding, such as “ex-dividend” and “ex subscription right” markdowns on the same day, only one single adjustment factor (six decimal places) is computed using the total markdown. Where several adjustment events are required for a single share but at different times, the factors rounded in such a way are multiplied by each other, and the product is rounded to six decimal places again.

When determining the  $c_{it}$  adjustment factor for subscription rights, the rights value is used rounded to two decimal places. Only in the case of a capital increase using company reserves will such a rights value not be rounded. If a dividend disadvantage has to be prorated (e.g. for three months), the value of such a disadvantage used for index calculation is rounded to two decimal places.

The free float factors are used as figures rounded to four decimal places.

The indices are rounded to two decimal places and published accordingly. The  $F_i$  factors are rounded to five decimal places and published accordingly, changing with each share-specific adjustment.

If a dividend disadvantage has to be prorated, the value of such a disadvantage used for index calculation is rounded to two decimal places.

### 3.3 Index Flags

An index is published with the label “A” (“amtlich”) once the opening criteria are fulfilled. Where the opening criteria have not been met for an index on a certain trading day, an index value is derived from the last available prices at the end of the calculation period. Accordingly, this index is labelled “I” (indicative). If the number of corresponding securities is between the minimum number and the total number shown in the table, the indices are also labelled “R” (representative).

Subsequent index ticks are continuously checked for its deviation. Once an index specific threshold is breached, the corresponding index ticks are disseminated with an index supplement “U” (for unchecked, instead of “A” for amtlich) and an immediate operational check is triggered. If the deviation was justified (e.g. due to market conditions), the index will manually be switched back to “A”, i.e. labelled in line with its corresponding status.

### 3.4 Calculation Correction

This section outlines the rules and procedures applicable in case of a calculation error meaning the provision of index values, use of index constituents or other elements or the application of weightings, capping, or other aspects of the index methodology in a manner that is not in line with this index methodology, e.g. due to a mistake, incorrect input data, etc. Rule-based Correction

STOXX Ltd. corrects a Calculation Error without delay on the dissemination day it occurred, provided that STOXX Ltd. becomes aware of such Calculation Error before 15:30 CET of that dissemination day and insofar as technical and operational feasible. STOXX Ltd. does not change intraday index constituents of an index.

If STOXX Ltd. became aware of a Calculation Error at or after 15:30 CET, STOXX Ltd. aims at correcting the Calculation Errors as of the end of the next dissemination day, including corrections to index constituents.

STOXX Ltd. amends without undue delay previous incorrect index values or input data only if required to calculate subsequent index values. Incorrect real-time index values disseminated before the effective time of the correction are not restated.

### 3.4.1 Non-rule based Correction

If the above-outlined rule-based error correction cannot be applied, the IGC assess without undue delay:

- if and how the Calculation Error should be corrected, including if the index shall be restated, and/or
- if the dissemination of index values shall be suspended (Discretionary Rule, see Section 1.1.1).

An index should be restated, where the performance of the index (other than Selection Indices) can no longer be replicated. A suspension of index dissemination is triggered when IGC decide that the correction will take a significant time during which misleading index values could lead to financial, legal and reputation risks (Discretionary Rule, see Section 1.1.1).

STOXX Ltd. suspends the dissemination of an index at the latest at the end of the dissemination day after it became aware of a Calculation Error, if the Calculation Error has not been corrected by then.

STOXX Ltd. will resume the dissemination of the index as soon as the correct index calculation is feasible and the correct historical values are available.

### 3.4.2 Notifications

In general, notifications take the form of an announcement on the DAX website (<http://www.dax-indices.com>). Announcements can (but need not, as determined by STOXX Ltd. from time to time) be published via financial relevant media.

With regard to Calculation Errors, STOXX Ltd. issues notifications in accordance with the following rules:

- STOXX Ltd. will publish a notification before correcting a Calculation Error. Notifications are effective immediately following their issuance, unless otherwise specified in the notification.
- The notification will specify if a Calculation Error will be corrected retrospectively. In case of retrospective correction, STOXX Ltd. will publish the notification using the new end of day closing price.
- If STOXX Ltd. decides under Section 3.4.1 that index dissemination is suspended until the Calculation Error is corrected also a resume notification is

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published specifying the point in time when index dissemination is resumed and the correction will take place.

STOXX Ltd. will refrain from the issuance of a notification if it reaches the view that the issuance of a notification is not in line with applicable laws and may decide to issue such Notification at a later point in time when such reasons have lapsed (Discretionary Rule, see Section 1.1.1). By reason of force majeure or other events beyond the control of STOXX Ltd. it might become impossible for STOXX Ltd. to issue a notification in due time or by the means set out herein. In such cases STOXX Ltd. may exceptionally issue the notification either subsequently immediately following such event or in any case by other means (Discretionary Rule, see Section 1.1.1).

### 3.5 Cap Limit

Capping is a procedure which determines the suitable weighting of index constituents and prevents single underlyings from dominating the index performance.

#### 3.5.1 Cap Limit RX REIT All Share Index

There is no cap limit for RX REIT All Share Index.

#### 3.5.2 Cap Limit RX REIT Index /RX Real Estate Index

On the day of regular quarterly chaining, the weighting of any single company in RX REIT Index is capped to 10 percent of the index capitalization, respectively. In case of less than ten companies in the index the cap procedure is not carried out.

Initially, the index weightings are calculated with the entire free float market capitalisation. In a second step, it is checked whether the capping limit has been exceeded. In this case, the number of shares in the affected company is reduced until the weighting is below the capping limit. The implied reduction of the overall index capitalisation (sum of the free float market capitalisation of all companies in the index) may mean that another company exceeds the capping limit. Capping is an iterative process and is now performed again for this company until no companies exceed the capping limit.

If the capped portion of a company rises above 10 percent or falls below 10 percent in the course of a quarter, it is raised or lowered back to the capping limit only on the following chaining date, where applicable.

### 3.6 Adjustments - Corporate Actions

The RX performance indices is adjusted for exogenous influences (e.g. price-relevant capital changes) by means of certain correction factors, assuming a reinvestment according to the 'opération blanche'.

The RX indices require a simultaneous adjustment of systematic price changes. The prerequisite for this is to calculate the correction factor on an ex-ante basis.

Consequently, already the first 'ex' price can be adequately included for index calculation purposes. The ex-ante incorporation of adjustments presupposes a general acceptance of the computation formula as well as a general availability of the parameters used.

All parameters necessary for the respective computation are available from Deutsche Börse via its website ([www.dax-indices.com](http://www.dax-indices.com)) on the evening before each adjustment. As with all other adjustment processes there may be differences between the computed values and the actually traded prices. However, since a preliminary correction is necessary and any delay would be problematic, this procedure remains the most appropriate one.

The calculated adjustment factor and a synthetic price accordingly adjusted for this factor are used in the index from the ex-date of a share as long as there is no 'ex' price available.

#### 3.6.1 Distributions

##### 3.6.1.1 Cash Dividends and Other Distributions

The  $c_{it}$  adjustment factors for dividends, bonus and special distributions are calculated as follows:

$$c_{it} = \frac{P_{i,t-1}}{P_{i,t-1} - D_{i,t}} \cdot c_{it-1}$$

whereby:

$P_{i,t-1}$  = Closing price of the relevant share on the day before the ex-dividend date

$D_{it}$  = Cash dividend, bonus dividend or special distribution on day t

Within the framework of index calculation, the share price is thus modified by the amount of the respective cash distribution, without deduction of capital gains tax.

Dividends and bonus distributions are corrected only in terms of performance indices, with the computation also to be exclusively based on the cash dividend. Special distributions are taken account of in both performance and price indices.

### 3.6.1.2 Distributions > 10 percent of Market Capitalization

If the absolute amount of the accumulated distributions (dividends, bonus and special distributions, spin-offs or subscription rights on other security-classes) between two regular chaining dates accounts for more than 10 percent of the market capitalization of the distributing company on the day before the first distribution, the part of the distribution exceeding the 10 percent will not be re-invested in a single stock but in the overall index portfolio per unscheduled chaining.

In such case the adjustment factor for the expecting markdown for 10 percent of the distribution will be calculated according to the formulas described in chapter 3.6.1.1. The rest of the expecting price down will be affected with the adjustment of chaining factor as described in chapter 3.7.2.

#### Example 1 –Dividend distribution of 25 percent

A company A which is included to the index with a current share price of €100 and current adjustment factor of 1 pays a special dividend of €25 to the equity holders on the ex-date. For the part of the distribution which accounts for 10 percent of the overall capital (10 Euro) an adjustment factor (1.11111) will be calculated according to chapter 3.6.1.1. The remaining price down of €15 will be adjusted on the chaining date as described in chapter 3.7.2 .

#### Example 2 – Dividend distribution of 5 percent on day t, Spin-Off of 10 percent on the next day

A company B which is included to the index with a current share price of €10 and current adjustment factor of 2 pays a special dividend of €0.5 on the ex-date. The

special dividend will be adjusted with the adjustment factor as described in chapter 3.5.1. The new adjustment factor correspondingly is calculated as 2.105263. On the next day company C will be spun-off from company B. Firstly, the company C will be included in the index and excluded on the next day with the close price of €1 as described in chapter 3.5.8. The price down is €1 or 10 percent based on the capitalization before the first distribution. The accumulated price down is 15 percent of the market value. Up to and including 10 percent the price down - in this case €0.5 – will be adjusted by the ci factor in accordance with section 3.5.1. The remaining price down of €0.5 will be adjusted on the chaining date as described in 3.6.

### 3.6.2 Changes in Share Capital

#### 3.6.2.1 Capital Increases

The  $c_{it}$  adjustment factors for capital increases (against cash contributions, or out of company reserves) are determined as follows:

$$c_{it} = \frac{p_{i,t-1}}{p_{i,t-1} - BR_{i,t-1}} \cdot c_{it-1}$$

whereby:

$$BR_{i,t-1} = \frac{p_{i,t-1} - p_B - DN}{BV + 1}$$

and:  $p_{i,t-1}$  = Closing price on the day before the ex-dividend date

$BR_{i,t-1}$  = Theoretical value of subscription rights

$p_B$  = Subscription price

$BV$  = Subscription ratio

$DN$  = Dividend disadvantage

For capital increases out of company reserves:  $p_B = 0$

The dividend disadvantage is equivalent to the last dividend paid or the proposed dividend published by financial data providers. For issues on which options are traded at Eurex, this procedure is coordinated with Eurex which takes account of the respective rights markdown to adjust the exercise prices of the various equity options.

#### 3.6.2.2 Capital Reductions

The following formula is used to calculate the  $c_{it}$  adjustment factor in the case of a simplified capital reduction:

$$c_{it} = \frac{1}{V_{it}} \cdot c_{it-1}$$



whereby:  $V_{it}$  = Reduction ratio of company i valid at time t

In the event of a capital reduction and subsequent capital increase against additional contributions, the introduction of a new class of shares is handled as follows:

The old classes are removed, and the new one is included with the corresponding computation of a chaining factor. In this context, two assumptions are made: first that the last traded price could have been achieved for the purpose of the theoretical transaction, and the released capital would be invested in the new class on the subsequent day.

The new class is included in the index based on the respective opening price on the first day of the new quotation.

### 3.6.3 Nominal Value Changes and Share Splits

In the case of nominal value changes (or share splits), it is assumed that the respective price changes occur in proportion to the related nominal value (or number of shares). The adjustment factor reflects this assumption accordingly:

$$C_{it} = \frac{N_{i,t-1}}{N_{i,t}} \cdot C_{it-1}$$

whereby:  $N_{i,t-1}$  = Previous nominal value of share class i (or new number of shares)

$N_{it}$  = New nominal value of share class i (or previous number of shares)

### 3.6.4 Spin-Offs

Where a company, A, spins off one of its divisions into new, independent companies, the adjustment is carried out as described below.

A theoretical markdown cannot be calculated on an ex-ante basis since there is no closing price for the shares of the new companies. The spun-off entities are additionally included in the index at a price of 0 on the ex-dividend date to avoid any index tracking errors. For a spin-off affecting the DAX®, for instance, this implies that the index is calculated based on more than 30 issues for at least one day. On their first trading day, following the Xetra® closing auction, the spun-off companies are

removed from the index. At the same time, the  $c_i$  factor of company A is adjusted as follows:

$$c_{i,t}^A = \left( 1 + \sum_{j=B}^N \frac{c_{i,t-1}^j \cdot p_{i,t-1}^j}{c_{i,t-1}^A \cdot p_{i,t-1}^A \cdot BV_j} \right) \cdot c_{i,t-1}^A$$

whereby:

$p_{it-1}^A$	=	Closing price of "A" shares on t-1
$p_{it-1}^B$	=	Closing price of spun-off company j on t-1
$BV_j$	=	Subscription ratio of spun-off company j
t-1	=	First trading day of spun-off company j
t	=	point in time in which the spun-off companies are removed from the index

### 3.6.5 Subscription Rights on Equity

#### 3.6.5.1 Subscription Rights on Other Share Classes

Where shareholders of a company (class A) are granted subscription rights to shares of another class (class B) of the same company, two different scenarios must be distinguished:

**The shares for which such a subscription right exists are already listed**

The  $c_{it}$  adjustment factor is computed in line with a capital increase of class-A shares:

$$c_{it} = \frac{p_{it-1}^A}{p_{it-1}^A - BR_{it-1}}$$

$$\text{whereby: } BR_{it-1} = \frac{p_{it-1}^B - p_B - DN}{BV + 1}$$

$BR_{it-1}$  = Theoretical value of subscription rights

$p_{it-1}^A$  = Closing price of class-A shares on the day before the ex-dividend date

$p_{it-1}^B$  = Closing price of class B shares on the day before the ex-dividend date

$p_B$  = Subscription price

BV = Subscription ratio

DN = Dividend disadvantage of class B New issue of shares to which such subscription right is related

In this case, the exact theoretical value of subscription rights cannot be calculated on an ex-ante basis since there is no closing price with respect to the new class. Therefore, the index is corrected as follows:

The expected price for the new shares is determined on the basis of the price difference between ordinary and preference shares of comparable companies. This price is used in line with the procedure described above to compute the respective subscription right.

### 3.6.6 Subscription Rights on Fixed-Income Instruments

An evaluation of the respective fixed-income instrument on the basis of the net present value method is necessary to determine the value of rights. Future revenues are estimated without deducting capital gains tax, and are first being discounted on the date on which payment of the subscription price becomes due.

No adjustment is required if there is no rights trading (in the event of issuing terms in line with prevailing market conditions).

#### 3.6.6.1 Subscription Rights on Profit-Participation Certificates

The  $c_{it}$  adjustment factor for rights related to profit-participation certificates is calculated in the following way:

$$c_{it} = \frac{p_{i,t-1}}{p_{i,t-1} - BR_{i,t-1}} \cdot c_{it-1}$$

whereby:  $p_{i,t-1}$  = Closing price of share i on the day before the ex-dividend date

$BR_{i,t-1}$  = Theoretical value of subscription rights

Discounting is effected using the actual/actual day count.

With the purchase price being taken into account, the capital value at the time of payment is obtained according to the following equation:

$$KW_{t-1} = -P + K_1 * q^{\left(\frac{-t}{365}\right)} + K_2 * q^{\left(\frac{-t}{365}\right)} * q^{-1} + \dots + (T + K_n) * q^{\left(\frac{-t}{365}\right)} * q^{-n+1}$$

whereby:

$KW_{t-1}$	=	Capital value of the participation certificate on the day before the ex-dividend date
$q$	=	$1 + r$
$r$	=	Discounting interest rate
$t$	=	Period from the date of issue to the first interest due date (in days)
$P$	=	Purchase price of the profit-participation certificate
$K_i$	=	Coupon payment in year $i$
$T$	=	Redemption
$n$	=	Term of the participation certificate (in years)

The discounting interest rate applied here is equivalent to the yield of a zero bond with the corresponding maturity, plus a risk add-on determined in line with comparable instruments. The capital value is rounded to two decimal places.

Assuming that profit-participation certificates are offered using a  $z: 1$  ratio, the value of rights ( $BR_{i,t-1}$ ) per share is

$$BR_{i,t-1} = \frac{KW_{t-1}}{z}$$

### 3.6.6.2 Subscription Rights on Bonds

The procedure is in line with that described in section 3.6.6.1, with the respective bond being valued by means of the net present value method<sup>1</sup>. The subscription ratio is subsequently considered and the correction factor established.

### 3.6.6.3 Subscription Rights on Instruments with Embedded Options

The procedure for subscription rights that involve instruments vesting an option right also facilitates the computation of the various correction factors on an ex-ante basis (Discretionary Rule, see Section 4.6)..

### 3.6.6.4 Subscription Rights on Profit-Participation Certificates Cum Warrants

The  $c_{it}$  adjustment factor for subscription rights on profit-participation certificates cum warrants is determined according to the following pattern:

- 1) Valuation of the fixed-interest component of the profit-participation certificates cum warrants issue
- 2) Valuation of warrants
- 3) Calculation of the value of subscription rights
- 4) Computation of the adjustment factor

to 1) Valuation of the fixed-interest component of profit-participation certificates cum warrants

The valuation of the fixed-interest component of profit-participation certificates cum warrants ( $KW_{t-1}$ ) is consistent with the valuation of profit-participation certificates set out in section 3.5.10.

to 2) Valuation of warrants

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<sup>1</sup> "Capital budgeting technique used to determine the benefits offered by investment projects. The net present value is calculated by discounting all inflows and outflows at the reference date." [Gabler Wirtschaftslexikon; as at May 2015]

Warrants are valued using the binomial option pricing model which permits dividend payments to be taken into account during computation. The dividend used is the average of the last three dividends paid. Where a dividend has already been announced, then the aggregate of this value and the two preceding dividend payments is taken for averaging purposes. The volatility used is the annualized 250-day volatility of the underlying instrument. The interest rate applied here is equivalent to the yield of a zero-coupon bond with a maturity corresponding to the option's lifetime. The option is valued at the time of issue of the respective profit-participation certificates cum warrants, irrespective of its exercise period. The option value is rounded to two decimal places.

The dilution effect is taken into account as follows:

$$O = \frac{O_B \cdot N}{N + n}$$

whereby: O = Option value  
 $O_B$  = Value of the option right without dilution effect  
 N = Number of shares prior to the exercise of option rights  
 n = Potential number of shares ensuing from the exercise of option rights

to 3) Calculation of the value of subscription rights

The capital value of the profit-participation certificate and the option value are aggregated to form the total value of a profit-participation certificate cum warrants. Assuming that profit-participation certificates cum warrants are offered using a z: 1 ratio, the value of rights ( $BR_{i,t-1}$ ) per share is

$$BR_{it} = \frac{KW_{t-1} + O}{z}$$

to 4) Computation of the adjustment factor

The adjustment factor is computed as follows:

$$c_{it} = \frac{p_{i,t-1}}{p_{i,t-1} - BR_{i,t-1}} \cdot c_{it-1}$$

### 3.6.6.5 Subscription Rights on Bonds with Warrants or Convertible Bonds

Computation is in line with the procedure described in section 3.5.11.1 above. The fixed-interest and option components are valued on a separate basis and then aggregated. The dilution effect and subscription ratio are subsequently taken into account, and the adjustment factor is determined.

## 3.7 Chaining

Quarterly chaining is carried out on the respective third Friday in March, June, September and December. The index is calculated on this day using the weights applicable up to that point for the last time. The new weights will apply from the next trading day. Xetra® closing prices on the chaining date form the basis for the chaining.

### 3.7.1 Quarterly Chaining

The quarterly chaining procedure encompasses the following measures:

- Changes to the composition of the various indices (cf. chapter 2)
- The number of shares and the respective free float factors are updated in accordance with the capital changes carried out. The free float factor is determined according to the rules outlined in Guide to the DAX Equity Indices.
- The accumulated income from distributions and capital changes is allocated to the index component issues according to the respective new weights. For this purpose, the individual  $c_{it}$  adjustment factors are set to 1.
- A chaining factor is calculated to avoid a gap in the respective index.

These measures help to prevent the weighting scheme from “ageing” due to capital changes and the accumulation of income.

Chaining is carried out in three steps:

a) Calculation of the index value on the chaining date according to the old weighting scheme

The following applies accordingly:

$$\text{Index}_t = K_T \cdot \frac{\sum_{i=1}^n p_{it} \cdot ff_{iT} \cdot q_{iT} \cdot c_{it}}{\sum_{i=1}^n p_{i0} \cdot q_{i0}} \cdot \text{Base}$$

This value corresponds to the closing index published on the date of chaining, and is used with two decimal places (as published) for all subsequent calculations.

b) Computation of an interim value

The interim value is computed using the number of shares valid on the chaining date ( $q_{i,T+1}$ ) and the current free-float-factors<sup>2</sup> ( $ff_{i,T+1}$ ). The  $c_{it}$  adjustment factors are set to 1.

The following applies accordingly:

$$\text{Interimvalue} = \frac{\sum_{i=1}^n p_{it} \cdot ff_{i,T+1} \cdot q_{i,T+1}}{\sum_{i=1}^n p_{i0} \cdot q_{i0}} \cdot \text{Base}$$

The interim value is used as an exact figure for subsequent calculations.

c) Calculation of the new chaining factor

The following applies accordingly:

$$K_{T+1} = \frac{\text{Index}_t}{\text{Interim value}}$$

After chaining, the index is computed on the basis of the new chaining factor ( $K_{T+1}$ ).

<sup>2</sup> For RX REIT All Share Index:  $ff_{i,T}, ff_{i,T+1} = 1$



After calculation of the chaining factor, capital changes and dividend payments due on the date of chaining are taken into account via the  $c_{it}$  factor.

The  $F_i$  weighting factors of the index formula based on relative weights are calculated as follows:

$$F_i = K_{T+1} \cdot \frac{ff_{i,T+1} \cdot q_{i,T+1} \cdot c_{it}}{\sum_{i=1}^n q_{i0}} \cdot 100$$

### 3.7.2 Unscheduled Chaining

In the event of a change in the index composition, chaining is carried out in line with the procedure described in section 1.1 above, however, without adjustment to the number of shares and the various  $c_{it}$  factors. Newly included issues are taken into account with their current factors from Prime All Share. In case of an unscheduled segment change from General Standard to Prime Standard the factors from CDAX® are taken. Computation of the interim value is based on the component issues of the revised index portfolio.

$$\text{Interimvalue} = \frac{\sum_{i=1}^n p_{it} \cdot ff_{iT} \cdot q_{iT} \cdot c_{it}}{\sum_{i=1}^n p_{i0} \cdot q_{i0}} \cdot \text{Base}$$

With the new chaining factor to result as:

$$K_{T+1} = \frac{\text{Index}_t}{\text{Interim value}}$$

## 4 Limitations

This section applies in the event of Limitations that occur in case of

- insufficient rules meaning, the absence of a methodology rule, provision or procedure which leads to the failure of determining the respective index value or which leads to an index value that does not properly reflect the concept / nature of the index, e.g.
  - performance of the index can no longer be replicated by a long portfolio tracking the index;
  - insufficient available index constituents to fulfil the requirements of the Index Methodology; or
  - market disruption which results in the performance of the index being unable to be tracked,
- unclear rules, meaning a situation in which the rules leave multiple possible interpretations on how a certain rule shall be applied to a specific situation
- failing to produce index values as intended,
- data insufficiency, meaning a scenario in which the calculation of an index is no longer possible due to insufficient data quantity or quality, and
- extreme market events, meaning events that by their nature cannot be foreseen or whose impact on an index or the economic reality the index represented cannot be determined in advance. Examples may be, but are not limited to, the following: (i) a country announces changes to its currency convertibility or restrictions on capital flows; (ii) a country experiences a market disruption, an event that materially negatively influences the aggregated liquidity and market capitalization of entire markets.

If a Limitation has occurred, the IGC shall decide if and how the Limitation shall be rectified (Discretionary Rule, see Section 4.6). Any such rectification may comprise deviations from the index methodology which may apply for the duration that the Limitation persists (Discretionary Rule, see Section 4.6).

If a decision to deviate from the index methodology is taken, it will be communicated as soon as possible in form of an Announcement or Press Release. STOXX Ltd. will refrain from the issuance of a notification if it reaches the view that the issuance of a notification is not in line with applicable laws and may decide to issue such notification at a later point in time when such reasons have lapsed (Discretionary Rule, see Section 4.6). By reason of force majeure or other events

beyond the control of STOXX Ltd. it might become impossible for STOXX Ltd. to issue a notification in due time or by the means set out herein. In such cases STOXX Ltd. may exceptionally issue the notification either subsequently immediately following such event or in any case by other means.

Any measures will be implemented two dissemination days later and will enter into effect the next dissemination day after implementation, unless a different effective date is specified in the notification.

If a Limitation has occurred, the IGC shall decide if and how the Limitation shall be rectified (Discretionary Rule, see Section 1.1.1). Any such rectification may comprise deviations from the index methodology which may apply as long as the Limitation persists (Discretionary Rule, see Section 1.1.1).

If a decision to deviate from the index methodology is taken, it will be communicated as soon as possible soon as possible in form of an Announcement or Press Release. STOXX Ltd. will refrain from the issuance of a notification if it reaches the view that the issuance of a notification is not in line with applicable laws and may decide to issue such notification at a later point in time when such reasons have lapsed (Discretionary Rule, see section 4.6). By reason of force majeure or other events beyond the control of STOXX Ltd. it might become impossible for STOXX Ltd. to issue a notification in due time or by the means set out herein. In such cases STOXX Ltd. may exceptionally issue the notification either subsequently immediately following such event or in any case by other means.

Any measures will be implemented two dissemination days later and will enter into effect the next dissemination day after implementation, unless a different effective date is specified in the notification.

## 5 Methodology Review

The purpose of the methodology review is to ensure the integrity of the index, i.e. that the index methodology remains executable and results in an accurate and reliable representation of the market / economic realities the index seeks to measure.

### 5.1 Frequency of Review

In order to ensure the index integrity is maintained at all times, the methodology is reviewed annually and ad hoc if a Limitation has occurred. If a Limitation cannot be properly dealt with by a methodology review, this may give rise to an index cessation or index transition. STOXX Ltd. shall not be liable for any losses arising from any decisions taken as part of a methodology review.

### 5.2 Review Procedure

#### 5.2.1 Initiation of Methodology Review

The IMC proposes an annual methodology review schedule for approval by IGC (Discretionary Rule, see Section 1.1.1).

The IMC is in charge of initiating ad hoc methodology reviews in case of a Limitation or on recommendations to initiate a Methodology Review by other STOXX Ltd. Committees (Discretionary Rule, see Section 1.1.1).

#### 5.2.2 Decision and Escalation

The following STOXX Ltd. Committees are responsible for making the decisions on amendments of an index methodology:

The IMC decides on changes to the index methodology, unless:

- a) a material change to the index methodology is proposed (see Section 5.3 below),
- b) the change is triggered by an Unclear Rule or Insufficient Rule (as part of a Limitation, Section 4), or
- c) where financial products relating to the index have a notional value/notional amount of more than EUR 100 Mio.

If the IMC is not in charge, the decision is taken by IGC (i.e. in the cases set forth in a) to c) above).

### 5.3 Material Changes with Consultation

In case of proposed material changes to the index methodology a consultation will be performed.

A change to an index methodology shall be considered as material in particular in the event of:

- a change in the index objective or market/economic reality the index aims to represent (e.g. market leader components vs. mid cap companies),
- a change which affects the composition and weighting rules of an Index,
- a change in the calculation methods and formulas,
- a change in the rules regarding the rebalancing of the weights of index constituents by application of the index methodology,
- a change of the rules regarding the review of index constituents and their respective weights by application of the index methodology and/or
- rules regarding a change in the adjustment of weights of the index constituents or the compositions of the index constituents (as applicable) of equity indices due to Corporate Actions,

resulting in a significant change of the concept / nature of the index. The IMC determines whether an amendment is material as defined. In cases where the materiality cannot clearly be assessed the IMC decides (Discretionary Rule, see Section 1.1.1).

STOXX Ltd. consults a proposed material change with reasonably affected licenses/investors. A licensee shall be considered affected if he has licensed the respective index. An investor shall be considered affected if he owns contracts or financial instruments that reference the respective index. Taking into account the principle of proportionality, STOXX Ltd. informs affected licenses/investors as follows:

- licensees either directly and/or via public consultation;

- investors either via licensees affected by the material change and/or via public consultation.

STOXX Ltd. shall inform affected licensees and investors of the key elements of the index methodology that will in its view be impacted by a proposed material change and information on the rationale for any proposed material change including an assessment as to whether the representativeness of the index and its appropriateness for its intended use are put at risk in case the proposed material change is not put in place.

The consultation shall enable investors and licensees to submit comments. The standard consultation period shall be at least 1 month with the option to extend this period (Discretionary Rule, see section 4.6). The IGC may decide to shorten the 1 month period (Discretionary Rule, see section 4.6) in the following cases:

- in urgent cases, such as a situation in which the index cannot be replicated anymore;
- in situations where there is no known licensee / investor impact or only a limited number of affected licensees / investors;
- in order to align the effective date of a proposed change with an Index Rebalancing, Index Review, and Corporate Action Adjustment, or
- any other similar cases.

The IGC in accordance with this Section 4.7.3 will consider the feedback received and decide whether the material change shall become effective (Discretionary Rule, see Section 1.1.1). The IGC is not bound by any feedback received. If the received feedback is ambiguous, the IGC may decide to conduct another consultation (Discretionary Rule, see Section 1.1.1). If no licensee / investor participate in the consultation, the consulted material change shall enter into effect as outlined in the consultation material.

If the IGC decides that a material change shall become effective, STOXX Ltd. will communicate a timeline on the implementation of the material change, if not already communicated in the consultation material. The decision will be communicated as soon as possible in form of an Announcement or Press Release. STOXX Ltd. will refrain from the issuance of a notification if it reaches the view that the issuance of a notification is not in line with applicable laws and may decide to issue such

Notification at a later point in time when such reasons have lapsed (Discretionary Rule, see section 4.6). By reason of force majeure or other events beyond the control of STOXX Ltd. it might become impossible for STOXX Ltd. to issue a notification in due time or by the means set out herein. In such cases STOXX Ltd. may exceptionally issue the notification either subsequently immediately following such event or in any case by other means.

STOXX Ltd. will after the consultation make available the licensees / investors feedback received in the consultation and STOXX Ltd.'s summary response to those comments, except where confidentiality has been requested by the respective licensee / investor.

## 5.4 Non-Material Changes without Consultation

Non-material changes of the index methodology, including a description of the impact and the rationale, will be announced via Announcement or Press Release, effective immediately following publication, unless otherwise specified in the notification (Discretionary Rule, see section 4.6). STOXX Ltd. will refrain from the issuance of a notification if it reaches the view that the issuance of a notification is not in line with applicable laws and may decide to issue such Notification at a later point in time when such reasons have lapsed (Discretionary Rule, see Section 1.1.1). By reason of force majeure or other events beyond the control of STOXX Ltd. it might become impossible for STOXX Ltd. to issue a notification in due time or by the means set out herein. In such cases STOXX Ltd. may exceptionally issue the notification either subsequently immediately following such event or in any case by other means.

## 6 Appendix

### 6.1 Historical Data

Index histories exist for all indices at least from the respective baseline date:

The DAX® price index continues the Börsen-Zeitung index, which historically extends back to October 1959. However, historical index levels of the DAX® performance index are only available since its baseline date in December 1987.

For the CDAX® price index there is a timeline which extends back to 1970. However, the history of the CDAX® performance index is only available since its baseline date in December 1987.

All histories up to and including 18 June 1999 are based on the prices of the floor trading on the FWB® Frankfurt Stock Exchange. Xetra® prices have been used to calculate the index since 21 June 1999.

## 6.2 Alpha Codes and ISINs

Index	Alpha (Price)	ISIN (Price)	Alpha (Perf.)	ISIN (Perf.)
RX REIT Index	LZN9	DE000A0MEN74	LZN8	DE000A0MEN66
RX REIT All Share Index	LZNB	DE000A0MEN90	LZNA	DE000A0MEN82
RX Real Estate Index	3BQ3	DE000A0S29Y1	3BQ2	DE000A0S3AV4



## 6.3 Contact

- **Information on prices, index concepts and licenses**

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