

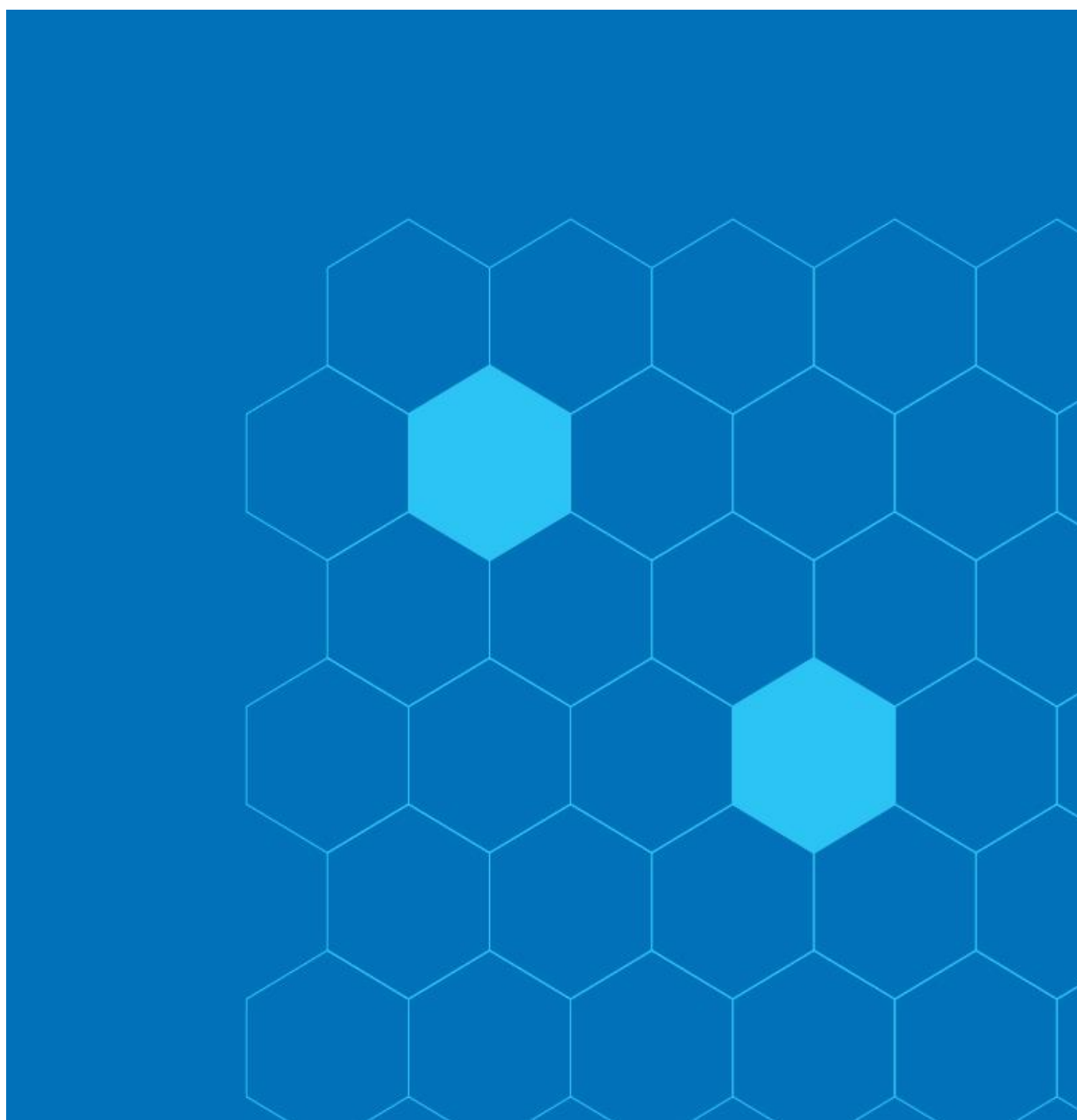
NOVEMBER 2024

Guide to the eb.rexx[®] Bond Indices

Effective as of 2nd December 2024

Formerly known as Guide to the eb.rexx[®] Index Family

STOXX.com



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DEUTSCHE BÖRSE
GROUP

eb.rexx® Bond Indices

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1. INTRODUCTION

1.1. GENERAL INFORMATION

With effect to August 2019 Deutsche Börse AG has transferred the administration of the Indices formerly known as the eb.rexx® Index Family of Deutsche Börse AG to its affiliate STOXX Ltd..

With effect from 2 December 2024 STOXX Ltd. has outsourced the index calculation, index data reporting and index review of the eb.rexx® Bond Indices to ICE Data Indices LLC in accordance with Art. 10 of Regulation 2016/1011 (“Benchmark Regulation or “BMR”), referred to as ‘outsource service provider’ in the rest of this Guide to the eb.rexx® Bond Indices. STOXX Ltd. remains the index administrator of the eb.rexx® Bond Indices in accordance with Art. 3 BMR.

STOXX Ltd. develops, creates and publishes Indices for certain uses, 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 eb.rexx® Bond Indices are governed by the respective index methodology applicable to the respective index or index family. Purpose of this Guide “Guide” is to provide for a comprehensible index methodology in continuity of the former eb.rexx® Index Family of Deutsche Börse AG as last amended with effect from 21 December 2018 (version 4.1).

In order to ensure the highest quality of each of its indices, STOXX Ltd. exercises the greatest care when compiling and calculating fixed income 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 eb.rexx® Bond 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.

2. OVERVIEW OF EB.REXX® BOND INDICES

2.1. OVERVIEW

The eb.rexx® Bond Indices reflect the government bond market for German fixed-income securities denominated in Euro. The outsource service provider is responsible for the calculation and distribution of the various indices. All indices are calculated using ICE reference data and ICE pricing data, as described in the ICE Bond Index Methodologies' Guide at www.ice.com.

All eb.rexx® Bond Indices are based on selection criteria that ensure high liquidity for the underlying bonds, thus facilitating the tracking of the indices.

There is one segment for which selection indices are additionally calculated - eb.rexx® Government Germany Index. It measures the investment performance in the overall market for highly-liquid German government bonds.

The following eb.rexx® Bond Indices are calculated and distributed:

Index Name	Maturity	Type	ISIN	Symbol
eb.rexx Government Germany Overall	1.5+	Price	DE000A0BRC00	R1GK
		Total Return	DE000A0BRC18	R1GP
eb.rexx Government Germany 1.5-2.5	1.5-2.5	Price	DE0007201915	RXP1
		Total Return	DE0007201923	RXR1
eb.rexx Government Germany 2.5-5.5	2.5-5.5	Price	DE0007201931	RXP2
		Total Return	DE0007201949	RXR2
eb.rexx Government Germany 5.5-7.5	5.5-7.5	Price	DE000A0MEWM4	R8JR
		Total Return	DE000A0MEWL6	R8JQ
eb.rexx Government Germany 7.5-10.5	7.5-10.5	Price	DE000A0MEWP7	R8JT
		Total Return	DE000A0MEWN2	R8JS
eb.rexx Government Germany 5.5-10.5	5.5-10.5	Price	DE0007201956	RXP5
		Total Return	DE0007201964	RXR5
eb.rexx Government Germany 10.5+	10.5+	Price	DE0007201972	RXPX
		Total Return	DE0007201980	RXRX
eb.rexx Government Germany	1.5-10.5 Selection	Price	DE0007201881	RXPG
		Total Return	DE0007201899	RXRG
eb.rexx Government Germany 0-1	0-1	Price	DE000A0JZF66	I2ID
		Total Return	DE000A0JZF58	I2IC

3. EB.REXX® INDEX SELECTION RULES

3.1. CLASSIFICATION OF BONDS

The eligible bonds for the eb.rexx® indices are selected upon the availability of bond reference and pricing data at ICE Data Indices, LLC.

For the bond indices, no explicit liquidity filter is applied. The applied selection criteria of the index constituents facilitate the selection of liquid constituents due to filtering by issuer, country as well as minimum nominal amount outstanding for a bond. Consequently, stricter constraints on the selection criteria may favor the selection of the most liquid constituents for the index.

3.2. SELECTION OF BONDS

Eligible for the eb.rexx® indices are fixed coupon bonds with a minimum remaining term of 1,5 years (measured as the difference between the end of the relevant rebalancing month and a bond's maturity date). Green bonds, characterized by the fact that their issue proceeds are allocated to expenditures in the German Federal budget that have an environmental impact according to the German Ministry of Finance, which fulfil all index selection criteria, are also eligible for index selection.

Furthermore, the eb.rexx® Government Germany 0-1 index includes fixed coupon bonds with a maturity between one month and one year measured at each monthly rebalancing date. Green bonds, which fulfil all index selection criteria, are also eligible for this index selection.

For all indices, eligible bonds must have a minimum amount outstanding of EUR 4 bn. Zero coupon bonds, also known as accrual bonds, are not used for the composition of indices. Fixed coupon bonds with a coupon rate of zero are eligible for index selection. Newly issued bonds are eligible if the issue date is on or before cut-off (month-end date - 3 days) and settlement date can still go into the following month. No additional liquidity filter is applied on top of the filters on issuer, country and minimum nominal amount outstanding.

3.3. OVERALL AND MATURITY INDICES

The eb.rexx® Government Germany Overall, as well as the following maturity buckets, are calculated and distributed as described hereafter:

Index Name	Maturity	Description
eb.rexx Government Germany Overall	1.5+	Parent index for all 1.5+ years Maturity buckets
eb.rexx Government Germany 1.5-2.5	1.5-2.5	Derived from the Parent Index, Maturity Bucket 1.5 to 2.5 years ¹
eb.rexx Government Germany 2.5-5.5	2.5-5.5	Derived from the Parent Index, Maturity Bucket 2.5 to 5.5 years
eb.rexx Government Germany 5.5-7.5	5.5-7.5	Derived from the Parent Index, Maturity Bucket 5.5 to 7.5 years
eb.rexx Government Germany 7.5-10.5	7.5-10.5	Derived from the Parent Index, Maturity Bucket 7.5 to 10.5 years
eb.rexx Government Germany 5.5-10.5	5.5-10.5	Derived from the Parent Index, Maturity Bucket 5.5 to 10.5 years
eb.rexx Government Germany 10.5+	10.5+	Derived from the Parent Index, Maturity Bucket 10.5+ years

3.4. EB.REXX® GOVERNMENT GERMANY: SELECTION INDEX

The eb.rexx® Government Germany Index comprises the 25 largest German government bonds by notional amount with a remaining term of 1.5 to 10.5 years. In case of equal amount outstanding priority is given to the bond with most recent first settlement date. In case of equal amount outstanding and same bond first settlement date, priority is given to the bond which is already an index component.

The weight of any individual bond in the eb.rexx® Government Germany index is capped at 30 percent.

Index Name	Maturity	Type	ISIN	Symbol
eb.rexx Government Germany	1.5-10.5 Selection	Price	DE0007201881	RXPG
		Total Return	DE0007201899	RXRG

¹ The 1.5 year – 2.5 year maturity bucket includes bonds with a maturity between 1.5 year included and 2.499 years, measured at rebalancing. The same logic with respect to the upper maturity bound is applied to the other maturity buckets.

The eb.rexx® Government Germany Index includes bonds with a maturity between 1.5 year included and 10.499 years, measured at rebalancing.

3.5. EB.REXX® GOVERNMENT GERMANY 0-1

eb.rexx® Government Germany 0-1 reflects the development of the German short-dated government bonds with a residual maturity between one month and one year, which is calculated compared to the review effective date of the rebalancing. All bonds must have a minimum amount outstanding of EUR 4 bn. Any bond in the eb.rexx® Government Germany 0-1 index is weighted by market capitalization. The weight of any single bond in the index is capped at 30 percent.

The adjustment of eb.rexx® Government Germany 0-1 index composition and its weightings are carried out monthly, based on data and prices available up to the third last trading day of the month (inclusive), and are effective at the market open of the first trading day of the next month.

Index Name	Maturity	Type	ISIN	Symbol
eb.rexx Government Germany 0-1	0-1	Price	DE000A0JZF66	I2ID
		Total Return	DE000A0JZF58	I2IC

The eb.rexx® Government Germany 0-1 Index includes bonds with a maturity between one month and 0.999 years, measured at rebalancing.

3.6. MONTHLY REBALANCING

The eb.rexx® indices' rebalancing is performed according to the following rules on a monthly basis:

1. Bond selection within the eb.rexx® universe

At the close of the third last trading day of the month all bonds that meet the criteria above are selected by the outsource service provider and are assigned to the respective eb.rexx® indices.

2. Adjustment of the index composition

Each bond is assigned to the corresponding indices according to the classification criteria.

Eligibility for the eb.rexx® Selection Index is determined on the basis of a ranking list, where all eligible bonds are ranked according to nominal amount outstanding. In case of equal amount outstanding priority is given to the bond with most recent first settlement date. In case of equal amount outstanding and same bond first settlement date, priority is given to the bond which is already an index component.

3. Monthly adjustment of bonds' weightings

Bonds are weighted based on their market capitalization. Changes in the market capitalization, which occur between two index adjustment dates, are reflected in the index by updating its composition and become effective at the next rebalance (subsequent month).

4. Capping

Capping is a procedure which ensures that the weighting of index constituents is suitable and prevents single bonds from dominating the index. Capping will be applied to eb.rexx® Government Germany (Selection) Index and eb.rexx® Government Germany 0-1 (Money Market) Index.

Where the market capitalization of a single bond exceeds 30 percent, the weight of the bond is reduced so that the market capitalization is equivalent to 30 percent of the reduced index market capitalization ("capping"). Should yet another bond exceed the cap limit, the market capitalization is then determined so that the weight of each bond to be equal to 30 percent of the revised index capitalization. This procedure is repeated as long as there is no bond exceeding the cap limit.

5. Rebalancing timeframe

The projected new index composition for next month is announced in the projected constituent file on the first trading day of the current month. The indices are rebalanced at the close of the last trading day of the month, based on information available up to and including the third business day before the last business day of the month (the "lock-out date"). The new index composition and weights become effective on the first trading day of the next month.

On the last trading day of each month, this new composition list is distributed with closing prices of all bonds not before close of trading.

4. CALCULATION METHODOLOGY

4.1. INDEX CALCULATION

The base level of eb.rexx® indices is 100. The base date is 30 July 2003 for the eb.rexx® Government Germany 0-1 index and 31 December 2000 for the rest of the eb.rexx® Government Germany indices.

The indices are calculated on the basis of trades and bid quotes as per the ICE Pricing Data. Best evaluated bid quotes providing high quality information about the current price level are used for index calculation purposes. Fixed income evaluations, continuous evaluated pricing, end-of-day evaluations, evaluated curves, model-based curves, and Fair Value Information Services related to securities and any other investment advisory services with respect to securities are provided in the US through ICE Data Pricing & Reference Data, LLC and internationally through ICE Data Services entities in Europe and Asia Pacific. For the eb.rexx® Bond Indices, evaluated bid close prices are provided as of 17:15 CET.

From a portfolio perspective, the transaction cost applied is based on the bid-offer price spread of each security as a percentage of its index price plus accrued interest. The return adjustment will be applied to new additions to an index, and to any securities whose weights increase in the index, at each monthly rebalancing. The calculated transaction cost will be applied to the first day's performance and will be constant throughout the calendar month until the following rebalancing. Please consult ICE Bond Index Methodologies' Guide at www.ice.com for further details around transaction cost calculation.

4.2. SETTLEMENT CONVENTION

All eb.rexx® Bond Indices are calculated assuming next calendar day settlement.

4.3. CALCULATION PERIODS AND INDEX CALENDAR

The indices are calculated every 15 seconds in real-time and index values are updated in the event of an index value change, between 9:00 and 17:15 CET. Index calculation is based on the ICE Global Holiday Calendar. Typical global trading holidays are New Year's Day, Good Friday and Christmas Day. No indices are published unless a Global Holiday falls on the last business day of the month. If the last business day of the month falls on a weekday that is a Global Holiday, prices are updated for all local markets that are open and prices in all markets that are closed are rolled from the prior business day. Accrued interest is calculated for the new settlement date for all markets. Please consult ICE Bond Index Methodologies' Guide at www.ice.com for further details around index calendar.

4.4. INDEX FORMULAE

The eb.rexx® Bond Indices are calculated by ICE Data Indices, LLC, effective December 2nd, 2024 in both Price Return and Total Return versions. For Total Return indices, the monthly adjustment involves the reinvestment of coupon payments in the overall portfolio. This occurs once per period at each index composition cut-off date.

The calculation methods for both Price Return and Total Return indices follow the calculation formulas as described in the Calculation Formulas section, Calculating Index Values, in ICE Bond Index Methodologies' Guide at www.ice.com.

4.5. CALCULATION CORRECTION

This section outlines the rules and procedures applicable in case of a calculation error, meaning the provision of index values, usage 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.

4.5.1. 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 as far as technically and operationally feasible.

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 they are required for the subsequent index values calculation. Incorrect real-time index values disseminated before the effective time of the correction are not restated.

Any issues with publication of the indices during the day will be addressed as described in the Client Information section.

4.5.2. NON-RULE BASED CORRECTION

If the above-outlined rule-based error correction cannot be applied, the relevant STOXX Committee assesses 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, refer section 'Discretion').

An index should be restated, when the performance of the index (other than Selection Indices) can no longer be replicated. A suspension of index dissemination is triggered when relevant STOXX Committee decides that the correction will take significant time during which misleading index values could lead to financial, legal and reputational risks (Discretionary Rule, refer section 'Discretion').

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.

4.5.3. NOTIFICATIONS

As of December 2nd, 2024, Client Information related to eb.rexx® Bond Indices calculation is distributed by ICE Data Indices, LLC. Such Client Information may include but is not limited to any information related to rule-based calculation corrections, non-rule based calculation corrections, delays in index calculation or Index Data reports availability, technical issue encountered by ICE Data Indices, LLC.

4.6. INDEX TERMINATION POLICY

For termination of an index or an index family that underlie financial products issued on the market, to the knowledge of STOXX Ltd., a market consultation will be conducted by STOXX Ltd. in advance of the termination in line with STOXX Transition Policy and STOXX Consultation Policy (publicly available on STOXX website). The length of the consultation period will be defined in advance based on the specific issues of each proposed termination subject to STOXX Benchmark Transition Policy (Discretionary Rule, refer section 'Discretion'). During the consultation period, clients and third parties will have the chance to share their concerns regarding the termination of the index or index family. Based on the collected feedback, STOXX Ltd. may rethink its decision to terminate an index or an index family (Discretionary Rule, refer section 'Discretion'). At the end of the consultation period, STOXX Ltd. will publicly announce its final decision about the termination. A transition period will be granted in the event of termination (Discretionary Rule, refer section 'Discretion').

For termination of an index or an index family that do not underlie financial products issued on the market, no market consultation will be conducted.

5. PUBLICATION

5.1. INDEX DATA PUBLICATION

As of December 2nd, 2024, the eb.rexx® indices calculation is performed by ICE Data Indices, LLC. The eb.rexx® indices calculation encompass the distribution of end of day Index Data Reports and Index Rebalancing files on the ICE File Delivery System (ICE Index Platform, SFTP, or any other means defined by ICE Data Indices, LLC).

The distribution of Real-Time Index level remains under Deutsche Boerse Market Data + Services and further information can be found on [Deutsche Börse Market Data + Services -ISS STOXX Indices](#).

STOXX produces and distributes the Historical Data files containing eb.rexx® historical index close levels available at www.stoxx.com.

5.2. CLIENT INFORMATION

As of December 2nd, 2024, Client Information related to eb.rexx® indices calculation is distributed by ICE Data Indices, LLC. Such Client Information may include but is not limited to any information related to rule-based calculation corrections, non-rule based calculation corrections, delays in index calculation or Index Data reports availability, technical issue encountered by ICE Data Indices, LLC, etc.

Client Information related to eb.rexx® Bond Indices Real-Time feed is distributed Deutsche Boerse Market Data + Services. Such Client Information are related to any Real-Time feed events, such as technical release, Real time feed disruption, etc..

Client Information related to eb.rexx® Bond Index methodology or Index Governance decision are distributed by STOXX Ltd and available at www.stoxx.com. STOXX may also decide to communicate any other Client Information as described above, on a case-by-case basis and based on materiality assessment. Announcements can (but need not, depending on the decision of STOXX Ltd.) be published via financial relevant media.

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 the applicable laws and may decide to issue such Notification at a later point in time when such reasons have lapsed (Discretionary Rule, refer section 'Discretion'). 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, refer section 'Discretion').

6. ANALYTICS

6.1. INDEX ANALYTICS

There are several index analytics that are calculated by ICE Data Indices, LLC, effective December 2nd, 2024, in addition to the index values, which are displayed in the daily index level file. The calculations follow the procedure as described in the corresponding sections in ICE Bond Index Methodologies' Guide at www.ice.com.

REXX_Level_YYYYMMDD.csv

Attribute	Description
OAS	The average of the index constituents' market value weighted option-adjusted spreads.
Asset Swap	The average of the index constituents' market value weighted asset swap spreads
Bond Equity YTM	The average of the index constituents' market value weighted years to final maturity
Semi Yld To Worst	The yield to worst of the Index stated in semi-annual terms.
Effective Yield	The average of the index component's market value weighted effective yields.
Semi Mod Duration	The modified duration to maturity of an Index stated in semi-annual terms.
Semi Mod Dur To Worst	The modified duration to worst of an Index stated in semi-annual terms.
Eff Dur	The average of the index component's market value weighted effective durations
Semi Convexity	The Convexity for an Index stated in semi-annual terms.
Semi Convexity To Worst	The Convexity to Worst for an Index stated in semi-annual terms.
Eff Convexity	The average of the index constituents' market value weighted effective convexities.
No. of Issues	The number of constituent securities in an Index or Index segment
Face Value LOC	Sum of the index component's total amount outstanding.
Face Value USD	Sum of the index component's total amount outstanding in USD terms
Full Market Value LOC	Full market value of the index in local currency.
Full Market Value USD	Full market value of the index in USD terms.
Yld to Maturity	The average of the index constituents' market value weighted yields to maturity.
Yld to Worst	The average of the index constituents' market value weighted Yields to Worst
Convexity	The Convexity to maturity of the Index stated in conventional terms.
Convexity To Worst	The average of the index constituents' market value weighted convexities to worst.
Modified Dur	The modified duration to maturity of the Index stated in conventional terms.
Mod Dur To Worst	The modified duration to worst of the Index stated in conventional terms.
Maturity / WAL	Years to effective maturity date of the bond or years to the closest coupon reset date prior to maturity.
Yrs To Worst	Index level Years to Worst
PRR Index Val LOC	Price return index value in local currency
PRR % MTD LOC	Month-to-date return of the price return index in local currency

Rating	The average of the index constituents' market value weighted composite ratings.
Accrued Interest	The sum of the accrued interest values of the index constituents.
Cash value	The sum of the cash position of the index constituents.
Price	The average of the index constituent's face value weighted prices.
Par Wtd Coupon	The average of the Index constituent security coupons, weighted by the face value.
Mkt Wtd Coupon	The average of the index constituents' market value weighted coupons
Excess Swap Rtn % MTD	The percentage month-to-date excess swap return.
Excess Swap Rtn % YTD	The percentage year-to-date excess swap return.
Spread To Worst	The average of the index constituents' market value weighted spread to worsts.
Macaulay Dur	The average of the index constituents' market value weighted Macaulay durations.
Spread Duration	The average of the index constituents' market value weighted spread durations.
Full Market Value PrevMend LOC	Previous month-end full market value of the index in local currency terms.
TRR % 1-day LOC	The daily total return percentage of the index in local currency terms.
Transaction Costs % MTD	The sum of the bond level transactions cost %

6.2. BOND ANALYTICS

There are several bond analytics that are calculated by ICE Data Indices, LLC, effective December 2nd, 2024, which are displayed in the daily index constituent files. The calculations follow the procedure as described in ICE Bond Index Methodologies' Guide at www.ice.com,

REXX_Constituent_YYYYMMDD.csv

Attribute	Description
Par Wtd Coupon	Bond coupon value
Maturity Date	Bond maturity date
Rating	ICE composite rating of the bond
ISO Currency	Currency code of the bond
ISO Country	Country code of the issuer of the bond
ML Industry Lvl 1	ICE Sector Level 1 categorization
ML Industry Lvl 2	ICE Sector Level 2 categorization
ML Industry Lvl 3	ICE Sector Level 3 categorization
ML Industry Lvl 4	ICE Sector Level 4 categorization
Type	Seniority type of the bond
Face Value LOC	Face value of the bond in local currency
Price	Bond price
Accrued Interest	Accrued interest of the bond
Mkt % Index Wght	Weight of the bond in the index
Cash	Cash payment of the bond between rebalancing dates in percentage of the face value.
Mod Dur To Worst	Modified duration to worst of the bond
Yld to Worst	Yield to worst of the bond
Eff Dur	Effective duration of the bond
Effective Yield	Effective yield of the bond
OAS	Option-adjusted spread of the bond
PrevMend Price	Previous month-end price of the bond
PrevMend Accrued Interest	Previous month-end accrued interest of the bond
PrevMend Mkt % Index Wght	Previous month-end index weight of the bond
PrevMend Mod Dur To Worst	Previous month-end modified duration to worst of the bond
PrevMend Eff Dur	Previous month-end effective duration of the bond
PrevMend Eff Yield	Previous month-end effective yield of the bond
PrevMend OAS	Previous month-end option-adjusted spread of the bond
TRR % MTD LOC	The month-to-date total return percentage of the bond in local currency terms.
Excess Rtn % MTD	The month-to-date excess return of the bond

Asset Swap	Asset swap of the bond
PrevMend AssetSwp	Previous month-end asset swap of the bond
Bond Equiv YTM	Yield To Maturity
Semi Yld To Worst	Yield to worst of the bond in semi-annual terms
Semi Mod Duration	The modified duration to maturity of a bond or Index stated in semi-annual terms.
Semi Mod Dur To Worst	The modified duration to worst of a bond or Index stated in semi-annual terms.
Semi Convexity	The Convexity for a bond or Index stated in semi-annual terms.
Semi Convexity To Worst	The Convexity to Worst for a bond or Index stated in semi-annual terms.
Eff Convexity	Effective convexity of the bond
Yld to Maturity	Yield to maturity of the bond
Convexity	The Convexity to maturity of a bond stated in conventional terms.
Convexity To Worst	Convexity to worst of the bond
Modified Dur	Modified duration of the bond
Full Market Value LOC	Full market value of the bond in local currency terms.
Full Market Value USD	Full market value of the bond in USD terms.
Maturity / WAL	Years to effective maturity date of the bond or years to the closest coupon reset date prior to maturity.
Yrs To Worst	Years to worst of the bond
TRR Index Val LOC	Total return bond value in local currency terms
TRR Index Val USD U	Total return bond value in USD terms unhedged
TRR Index Val USD H	Total return bond value in USD terms hedged
TRR Index Val EUR U	Total return bond value in EUR terms unhedged
TRR Index Val EUR H	Total return bond value in EUR terms hedged
TRR Index Val GBP U	Total return bond value in GBP terms unhedged
TRR Index Val GBP H	Total return bond value in GBP terms hedged
TRR Index Val JPY U	Total return bond value in JPY terms unhedged
TRR Index Val JPY H	Total return bond value in JPY terms hedged
PRR Index Val LOC	Price return bond value in local currency terms
PRR % MTD LOC	The month-to-date price return percentage of the bond in local currency terms.
Excess Swap Rtn % MTD	Month-to-date excess swap return of the bond
Spread To Worst	Spread to worst of the bond
Macaulay Dur	Macaulay duration of the bond
Spread Duration	Spread duration of the bond
Coupon Frequency	Bond coupon frequency
Cash value	Coupon rate multiplied by the notional amount in case a coupon was paid between rebalancing dates, 0 otherwise
TRR % 1-day LOC	The daily total return percentage of the bond in local currency terms.

Full Market Value PrevMend LOC	Previous month-end full market value of the bond in local currency terms.
Market Value Added %	The percentage increase in the weight of the security in the index compared to the pre-rebalancing weight of the security on the month end rebalancing date.
Transaction Costs % MTD	For a bond, the difference in the bid-offer price of a security as a percentage of the security's price as of the month end rebalancing date.

7. LIMITATIONS

7. LIMITATIONS

This section applies in the event of Limitations that occur due to:

- insufficient rules, meaning the absence of a methodology rule, provision or procedure which leads to a failure when 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 physically replicated;
- insufficiently available index constituents to fulfil the requirements of the Index Methodology; 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
- data insufficiency, meaning a scenario in which the calculation of an index is no longer possible due to insufficient data quantity or quality;
- failure to produce index values as intended;
- market disruption which results in the performance of the index being unable to be tracked;
- events with a market impact that by their nature could reasonably not be foreseen, or events whose impact on an index or the economic reality the index intends to represent, cannot be determined in advance. Events covered in this section include, but are not limited to, events of natural, social, political, economic nature that may negatively impact regional or global societies or economies. Examples may be, but are not limited to, the following: (i) change to currency convertibility or restriction on capital flows announced by a country; (ii) market disruption, e.g. an event that materially negatively influences the aggregated liquidity, capitalization or tradability of an entire market; (iii) exchange closure, (iv) government intervention, (v) pandemic, (vi) natural catastrophe.

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

In this context, STOXX may also decide to cancel an index review.

If a Limitation that could justify the cancellation of an index review occurs two or fewer dissemination days before the scheduled review implementation day, the review will be performed as planned, if reasonably possible. This aims to avoid last minute changes and not undermine the trading activity that may have already been performed.

If a review is cancelled, STOXX aims to perform it at the next scheduled review of the index, whichever comes first and subject to the then prevailing market conditions.

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, refer section 'Discretion'). 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.

8. METHODOLOGY REVIEW

The purpose of the methodology review is to maintain 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.

8.1. FREQUENCY OF REVIEW

In order to ensure the index integrity is maintained, the methodology is reviewed annually and ad hoc if a Limitation has occurred. If a Limitation cannot be addressed 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.

8.2. REVIEW PROCEDURE

8.2.1. INITIATION OF METHODOLOGY REVIEW

The IMC proposes an annual methodology review schedule for approval by the IGC (Discretionary Rule, refer section 'Discretion').

The IMC is in charge of initiating ad hoc methodology reviews in case of a Limitation or based on recommendations to initiate a Methodology Review by other STOXX Committee (Discretionary Rule, refer section 'Discretion').

8.2.2. REVIEW DECISION AND ESCALATION

The following STOXX Committees are responsible for making the decisions on amendments to 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 'Material changes with consultation' below),
- b. the change is triggered by an Unclear Rule or Insufficient Rule (as part of a Section 'Limitation'), or
- c. it relates to a request for a market consultation,
- d. financial products relating to the index have a notional value/notional amount of more than EUR 100 mn.

If any of the conditions a) to d) above is met, the decision is taken by IGC.

8.3. MATERIAL CHANGES WITH CONSULTATION

As described in the STOXX Changes to Methodology Policy and in STOXX Consultation Policy (publicly available on STOXX website), prior to proposed material changes to the index methodology, a consultation will be performed.

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

- a) a substantial change in the index objective or market/economic reality the index aims to represent (e.g. market leader components vs. mid cap companies), or

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- b) a substantial change of the index methodology in aspects such as, but not limited to, the ones listed below and that would result in altering the overall concept or the nature of the index:
- i. calculation methods or formulas with a substantial impact on the index performance, or
 - ii. rules regarding the determination of index constituents by application of the index methodology, or
 - iii. rules regarding the determination of the weights of index constituents by application of the index methodology,
 - iv. rules regarding the treatment of corporate actions.

On the contrary, index methodology updates resulting from the application of existing methodology principles or minor clarifications of existing rules or corrections without altering the overall concept or the nature of the index are generally considered non-material.

The IMC determines whether an amendment is material as defined above. In case such determination is not possible, the proposed amendment shall be treated as material.

In case of Changes to Methodology as described in STOXX Changes to Methodology Policy a STOXX consults with reasonably affected stakeholders (“Stakeholders”) prior to take decision.

Stakeholders mean (a) persons or entities who have an index license with STOXX regarding a benchmark administered by STOXX (Subscriber) and/or as far as STOXX is reasonable aware (b) persons or entities and/or third parties who own contracts or financial instruments that reference a benchmark administered by STOXX (Investors)

Taking into account the Principle of Proportionality, STOXX informs affected Stakeholders as follows:

- either via public consultation open to the entire market and performed via STOXX website;
- or, when the relevant Stakeholders are known, on a restricted basis directly on the Stakeholders e-mail address.

STOXX shall inform in writing the Stakeholders on:

- the key elements of the proposed relevant changes
- the rationale for any proposed relevant changes
- the specific questions to be answered
- the deadline for receiving feedback
- the timeline of implementation of the Relevant Changes
- contact details where to provide feedback
- relevant definitions

The consultation shall enable Stakeholders to submit comments.

The standard consultation period shall be 1 month with the option to shorten or extend this period. The IGC may decide to shorten the 1-month period in the following cases:

- in extreme or exceptional market conditions or analogous extraordinary situations
 - in urgent cases, such as a situation in which the Index cannot be replicated anymore;
 - in situations where there is no known Stakeholders impact or only a limited number of Stakeholders;
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- in order to align the effective date of a proposed change with Index Maintenance; e.g. an Equity/Bond Index Rebalancing, Index Review, and Corporate Action Adjustment, or
 - any other similar cases applying the principle of proportionality.

The IGC s will consider the feedback received and decide whether the relevant changes shall become effective.

The IGC is not bound by any feedback received. Moreover, if the received feedback is ambiguous, or if no Stakeholders participated, the IGC may decide to conduct another consultation, which again will not be binding.

If the IGC decides that relevant changes shall become effective, STOXX will communicate a timeline on the implementation of the relevant changes, if not already communicated in the consultation material.

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

The decision will be communicated as soon as possible in the form of an Announcement or Press Release.

STOXX Ltd. will refrain from 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.

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.

At the end of each consultation STOXX Ltd. will make available the feedback received from Stakeholders in the consultation together with a summary of its response to that feedback, except where confidentiality has been requested by the respective Stakeholders. (Discretionary Rule, refer section 'Discretion').

8.4. 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, refer section 'Discretion')). 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, refer section 'Discretion')). 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.

8.5. PUBLICATION OF THE METHODOLOGY CHANGE

The effective date for benchmark methodology changes is aligned, where feasible, with the periodic benchmark reviews dates when the benchmark composition is changed, and a rebalancing is triggered to avoid extra ordinary impact for clients. Material methodology changes should generally be publicly announced 3 months prior to implementation. IGC may decide to shorten the notice period:

- a. In exceptional or urgent cases such as extreme or exceptional market conditions or analogous extraordinary situations
- b. in situations where there is no Stakeholder impact and where it has been agreed that the notice period has to be shortened but immediate communication is not possible. A case that requires urgent action is for example a situation in which the investor's ability to replicate the index benchmark performance with his or her portfolio is no longer ensured. In such cases, changes or amendments to the published index methodology must be made on the same day the new rule or change is implemented.
- c. to align with the period benchmark review dates and the rebalancing of the benchmarks.

In case of any proposed material change in its methodology, STOXX shall share its view on the key elements of the methodology that will be impacted by a proposed material change.

Furthermore, STOXX Ltd. shall include an assessment as to whether the representativeness of the benchmark and its appropriateness for its intended use are put at risk in case the proposed material change is not put in place. In case of any changes or amendments to the present Index Guide, Operations and Product will work together to ensure both the public and subscribers are provided with detailed information about the nature and rationale of the change as well as the implications and terms for the new methodology to enter into force.

8.6. 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.

8.7. EXERCISE OF DISCRETION

Discretion may only be exercised by STOXX Committee(s) (as defined hereafter) with a view to resolve issues arising in maintaining the prevailing index methodology in response to events, with an overarching aim to accurately and reliably measure the market or economic realities as defined in this Guide.

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 the relevant facts and circumstances only, must give proper weight to the various considerations and 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 by aiming to ensure that indices remain representative and can be replicated, taking into account, inter alia, some, or all of the following:
 - Relevance of the event to the eb.rexx® Bond Indices
 - Trading accessibility of the affected market
 - Availability of alternative markets
 - Ability of market participants to replicate the index or, where applicable, the results of the index review.
 - Public information related to the events and their development in the foreseeable future
- The body or person(s) exercising discretion must act honestly, reasonably, impartially and in good faith.

As part of the decision-making process, STOXX may consult with external stakeholders.

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 reasonability, and the interest of licensees or investors. Bodies and functions responsible for decision-making

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

The following bodies (hereafter each of them separately also referred to as “STOXX Committee”) are involved in the decision-making process relevant for the indices governed by this Guide:

- 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 Committee(s) may exercise discretion regarding the index methodology and its application

Case	Responsible STOXX Committee
Index Termination and Transition	IMC, IGC
Sector Affiliation	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
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
Review and approve treatment of Calculation Errors. Non-rule-based Correction.	IOC, 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
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
Extreme or exceptional market conditions or analogous extraordinary situations to be addressed in a fast track way (e.g. Pandemic)	IGC
Periodic review of current index methodologies (e.g. matching of underlying interest) including initiation of ad-hoc reviews of benchmarks or benchmark families and clarification of methodologies (if required).	IGC
(Annual) Review of the control framework (including identification of operational risks and definition of measures that address operational risks).	IOC, IMC
Review and approve reports on monitoring of outsourced service providers, contributors, risks and incidents reporting (Art. 10 BMR relevant)	IGC
Consideration and follow-up on the implementation of remedial actions based on results of internal and external audits.	IGC
Monitoring of input data (including input data from contributors).	IOC, IGC, OC
Review and approval of special cases identified during index review	IOC, IMC, IGC
Review and approval of complex corporate actions (disagreement on treatment of corp. action or application of rules)	IOC, IMC, IGC

Decisions with respect to complaints.	IGC
Review and approve periodic reporting requirements under the Periodic Review Policy.	IGC
Review and approve changes in case thresholds of significant or critical benchmarks exceeded and notify competent authority	IGC
Approval of launch of new products, including checks on suitability based on Positioning Paper .(including Regulatory Checklist, financial products that will be used and confirmation that any maintenance tool will be delivered by the launch date).	PAC, IGC
Responsibilities for clients, strategic or internal requests: -Final estimation of costs and revenues and final launch date -Final Positioning Paper (including Regulatory Checklist, financial products that will be used and confirmation that any maintenance tool will be delivered by the launch date).	PAC, IGC

9. HISTORY OF CHANGES

CHANGES TO THE RULES AND ADDITIONS TO THE INDEX FAMILY:

All amendments listed with effect prior to August 2019 are amendments to the Rules and Regulations of the former Deutsche Börse AG Guide to the eb.rexx® Index Family.

Amendments listed as of August 2019 are amendments to the Rules and Regulations of the Guide to the eb.rexx® Bond Indices, administered by STOXX Ltd, in continuation of the Rules and Regulations of the former Deutsche Börse AG Guide to the eb.rexx® Index Family.

With effect from 2 December 2024 STOXX Ltd. has outsourced the index calculation, index data reporting and index review of the eb.rexx® Bond Indices to ICE Data Indices LLC in accordance with Art. 10 of Regulation 2016/1011 ("Benchmark Regulation or "BMR"), referred to as 'outsource service provider' in this Guide. STOXX Ltd. remains the index administrator of the eb.rexx® Bond Indices in accordance with Art. 3 BMR.

9.1 CHANGES TO THE GUIDE

Published November 30 th , 2024 Effective December 2 nd , 2024	Version 5.8 - Methodology changes resulting from eb.rexx® Bond Indices' market consultation conducted in October 2024 - Governance update relating to outsourcing of eb.rexx® Bond Indices' calculation, index data reporting and index review to ICE Data Indices, LLC effective December 2 nd , 2024.
Published July 17, 2024 Effective July 17, 2024	Version 5.7 - Governance Update: General Rulebook Clarification and Guide Migration to STOXX Template

9.2 HISTORY OF CHANGES AS PER FORMER GUIDE VALID UNTIL JUNE 2024

25.08.2023	Version 5.6	Clarification relating to the eligibility for bonds with settlement date after the monthly review date
13.10.2022	Version 5.5	Decommissioning of the eb.rexx® Jumbo Pfandbriefe. Clarifications relating to the calculation time and publication procedure

28.01.2022	Version 5.4	Suspension Rule removal
22.06.2020	Version 5.3	Governance update
08.10.2019	Version 5.2	Clarification relating to EU Benchmark Regulation.
16.08.2019	Version 5.1	Clarification relating to EU Benchmark Regulation and changes relating to the transfer of index administration to STOXX Ltd.
21.12.2018	Version 4.1	Alignment on the naming convention for eb.rexx® Government Germany maturity indices
18.12.2017	Version 4.0	Changes to the rules reflecting the termination of Eurex Bonds business operations
10.10.2017	Version 3.15	Change of yield difference threshold for the alternative pricing source
10.10.2017	Version 3.14	Include liquidity requirements
05.02.2015	Version 3.13	Removal of the liquidity criteria
23.12.2014	Version 3.12	Clarification relating to IOSCO principles
30.04.2014	Version 3.11	Change of reference price source from Xetra Bonds to Boerse Frankfurt
17.12.2013	Version 3.10	Introduction of close prices adjustment for eb.rexx® Government indices and publication delay in index closing values
16.08.2013	Version 3.9	Update of contact details (Appendix)
19.01.2009	Version 3.8	Suspension of the liquidity criteria
01.01.2008	Version 3.7	Adjustment of rating consideration
02.05.2007	Version 3.6	Launch of eb.rexx® Jumbo Pfandbriefe and eb.rexx® Government maturity indices
02.04.2007	Version 3.5	Changes to the rules for Jumbo Pfandbriefe
03.07.2006	Version 3.4	Launch eb.rexx® Money Market
01.04.2006	Version 3.3	New liquidity criteria for selection indices
01.02.2006	Version 3.2	Consideration of issuer ratings
01.05.2005	Version 3.1	Amendment of monthly re-balancing procedure and formulae
01.12.2004	Version 3.0	Introduction of eb.rexx® Jumbo Pfandbriefe and eb.rexx® Government overall indices
21.07.2003	Version 2.3	Inclusion of additional index analytics
26.03.2003	Version 2.2	Inclusion of trademark rights

21.03.2003	Version 2.1	Inclusion of bond analytics
18.12.2002	Version 2.0	Launch of eb.rexx® Government indices
24.10.2002	Version 1.0	