

STOXX BENCHMARK STATEMENT STOXX BOND INDEX FAMILY



Regulation Clause	Regulation Subclause	Required Information	STOXX LTD Statement
<p>1. General Disclosure Requirements</p>			
<p>1.1 Date of Publication</p>	<p>Art. 1(1)(a) Commission Delegated Regulation (EU) 2018/1643 ("RTS")</p>	<p>The benchmark statement shall state: the date of publication of the statement and, where applicable, the date of its last update.</p>	<p>Date of Publication August 2019</p> <p>Date of Update February 2020</p>
<p>1.2 Definition of the market or economic reality and circumstances in which such measurement may become unreliable</p>	<p>Art. 27(1)(3) of Regulation (EU) 2016/1011 ("BMR"); Art. 1(2) RTS; Art. 1(3) RTS</p>	<p>The benchmark statement shall clearly and unambiguously define the market or economic reality measured by the benchmark and the circumstances in which such measurement may become unreliable.</p> <p>In defining the market or economic reality, the benchmark statement shall include at least the following information:</p> <p>(a) a general description of the market or economic reality;</p> <p>(b) the geographical boundaries, if any, of the market or economic reality;</p> <p>(c) any other information that the administrator considers to be relevant or useful to help users or potential users of the benchmark to understand the relevant features of the market or economic reality, including at least the following elements insofar as reliable data on these elements is available:</p>	<p>Definition of market or Economic Reality</p> <p>The STOXX Bond Index Family aims to measure the performance of portfolios of bonds indices. These portfolios include sub-classifications by: maturity; credit grade; sector; targeted liability cash profile and combinations thereof.</p> <p>STOXX applies clear and transparent rules to both the eligibility and selection criteria for all bonds within each component index. This family includes benchmarks where the portfolios are weighted by market capitalisation; portfolios may also include a cap or be equally-weighted such that certain issuers or industries do not dominate the portfolio.</p> <p>The base currency of the STOXX Bond Index Family is EUR.</p> <p>Benchmarks are calculated using different calculation rules. For example:</p> <ul style="list-style-type: none"> - they are calculated as a Price Index, without coupons; - they are calculated as a Gross Return Index; with reinvestment of coupon income.

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		<p>(i) information on actual or potential participants in the market; (ii) an indication of the size of the market or economic reality.</p> <p>In defining (the potential limitations of the benchmark and) the circumstances in which the measurement of the market or economic reality may become unreliable, the benchmark statement shall include at least:</p> <p>(a) a description of the circumstances in which the administrator would lack sufficient input data to determine the benchmark in accordance with the methodology; (b) where relevant, a description of instances when the accuracy and reliability of the methodology used for determining the benchmark can no longer be ensured, such as when the administrator deems the liquidity in the underlying market as insufficient;</p> <p>Any other information that the administrator reasonably considers to be relevant or useful.</p>	<p>Circumstances in which such measurement may become unreliable:</p> <p>The STOXX Bond Index Family uses as Input Data bond prices sourced from ICE Data Services. Foreign exchange rates are sourced from Thomson Reuters Benchmark Services. The measurement of the market or economic reality may become unreliable if ICE Data Services ceased to operate and the constituent bonds continued to trade elsewhere.</p>
1.3 Discretion	Art. 27(1)(3)(b) BMR	The benchmark statement shall lay down technical specifications that clearly and unambiguously identify the elements of the calculation of	<p>The rules and procedures to which the STOXX Bond Index Family must adhere to are written with the express intention of removing the need for any discretion in so far as this is feasible.</p> <p>Where the existing methodology does not fully prescribe how an event should be</p>

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		<p>the benchmark in relation to which discretion may be exercised, the criteria applicable to the exercise of such discretion and the position of the persons that can exercise discretion, and how such discretion may be subsequently evaluated.</p>	<p>dealt with or a complex or an unexpected operational event occurs (e.g. a complex corporate action or a market disruption) then discretion may need to be applied. STOXX has a clear set of procedures for dealing with events that require discretion and will apply these procedures to determine the appropriate treatment. In exercising discretion, STOXX ensures that the benchmark rationale is taken into account; market integrity is preserved; the ongoing reliability of the benchmark calculation is assured; any undue market impact is avoided, and the interests of stakeholders are taken into account. Depending on the nature of the event, the issue will initially be dealt with by either, the Index Operations Committee (“IOC”) or the Index Management Committee (“IMC”). These committees both consist of senior, full-time members of STOXX’s staff and will evaluate and document all occurrences in which discretion may need to be used. The IOC or IMC, as appropriate, will then send their evaluation to the Index Governance Committee (“IGC”) for oversight. The IGC consists of the senior management of STOXX. The subsequent evaluation of the use of discretion will be evaluated by the Oversight Committee (“OC”) which includes external representatives and representatives from the compliance.</p>
<p>1.4 Notice regarding changes to, or the cessation of, the benchmark</p>	<p>Art. 27(1)(3)(c) BMR</p>	<p>The benchmark statement shall provide notice of the possibility that factors, including external factors beyond the control of the administrator, may necessitate changes to, or the cessation of, the benchmark.</p>	<p>It is possible that certain factors, including external circumstances beyond the control of STOXX, will lead to changes or even cessation of an index within the Index Family.</p>
<p>1.5 Advice concerning material changes to financial contracts and</p>	<p>Art. 27(1)(3)(d) BMR</p>	<p>The benchmark statement shall advise users that changes to, or the cessation of, the benchmark</p>	<p>Any financial contracts or instruments that reference any member of the STOXX Bond Index Series Family or any investment funds that measure their performance by reference to a member of the family may be impacted by any changes to or</p>

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financial instruments		<p>may have an impact upon the financial contracts and financial instruments that reference the benchmark or the measurement of the performance of investment funds.</p>	<p>cessation of a Family member. These financial contracts, financial products and investment funds must be able to withstand, or at least address the issue of, any changes to or cessation of a family member.</p>
1.6 Rationale; review and approval procedures	Art. 27(2)(b) BMR; Art. 1(5) RTS	<p>A benchmark statement shall contain at least, the rationale for adopting the benchmark methodology and procedures for the review and approval of the methodology.</p> <p>In specifying the procedures for review of the methodology, the benchmark statement shall at least outline the procedures for public consultation on any material changes to the methodology.</p>	<p>Rationale for adopting the benchmark methodology:</p> <p>The STOXX Bond Index Family methodology is designed so that it can appropriately measure the economic reality previously described in Statement 1.2.</p> <p>Procedures for review and approval of the methodology:</p> <p>The new index approval process is managed by the Product Approval Committee (“PAC”), and the IGC assesses the ongoing suitability of any index or family of indices on at least an annual basis.</p> <p>Procedures for public consultations:</p> <p>Any methodology changes that are deemed material by the IMC will be subject to public consultation. Stakeholders will be informed of the consultation by notification and an announcement will be made on the STOXX website. Material changes can occur where there has been a structural change in the economic interest and to reflect this change the benchmark itself needs amending. Other material changes</p>

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1.7 Criteria and procedures used to determine the benchmark	Art. 27(2)(c) BMR	A benchmark statement shall contain at least the criteria and procedures used to determine the benchmark, including a description of the input data, the priority given to different types of input data, the minimum data needed to determine a benchmark, the use of any models or methods of extrapolation and any procedure for rebalancing the constituents of a benchmark's index;	<p>are where a benchmark: changes its objective; changes its calculation methods; changes its compositions and weightings; changes the way it is operationally maintained e.g. changes the way it deals with certain corporate actions. The IGC will carefully take note of any opinions received during the one-month consultation period and take note of them in deciding whether to proceed with the proposed change.</p> <p>The STOXX Bond Index Family uses as Input Data bond prices sourced from ICE Data Services. Foreign exchange rates are sourced from Thomson Reuters Benchmark Services. STOXX considers all this data as readily available. During a trading day, STOXX gives priority to the most recent traded intraday price. STOXX has no general criteria for minimum data requirements but, by continuously monitoring Transaction Data received, STOXX will be able to assess whether this data is adequate. If STOXX assesses that the quantity of Transaction Data is inadequate it will deem this to be a Limitation and the IGC will then exercise Discretion in how to resolve the situation. STOXX does not use any models or methods of extrapolation in relation to Input Data. Periodic reviews of all benchmarks are undertaken to ensure their current constituents are best suited to measure their defined market or economic reality. Where the review process requires adjustments to a benchmark's constituents to be made, a rebalancing will be undertaken. STOXX will inform stakeholders of this rebalancing by means on an index update announcement. This announcement will state the constituent additions and deletions for each affected index and the date on which these changes will become effective.</p>
1.8 Controls and rules that govern any exercise of judgement or discretion	Art. 27(2)(d) BMR; Art. 1(4) RTS	A benchmark statement shall contain at least the controls and rules that govern any exercise of judgement or discretion by the administrator or any contributors, to ensure	The exercise of judgement or discretion is subject to certain controls and rules which are designed to ensure a consistency of approach. In general; a body or person(s) exercising discretion must not be affected by any conflict of interest and must possess the requisite skills and knowledge necessary to exercise such discretion; all the facts and circumstances must be established and properly documented prior to the exercise of discretion; the exercise of discretion must

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		<p>consistency in the use of such judgement or discretion.</p> <p>In specifying the controls and rules that govern any exercise of judgement or discretion by the administrator or any contributors in calculating the benchmark or benchmarks, the benchmark statement shall include an outline of each step of the process for any ex post evaluation of the use of discretion, together with a clear indication of the position of any person(s) responsible for carrying out the evaluations;</p>	<p>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, and must ignore irrelevant facts and circumstances.</p> <p>Should any ex post evaluation of the use of discretion be required, STOXX will maintain a written record of all the circumstances in which judgement has been used by the IOC, IMC and, if applicable, any comments received from the IGC. For further information please refer to Statement 1.3.</p>
<p>1.9 Determination in periods of stress</p>	<p>Art. 27(2)(e) BMR</p>	<p>A benchmark statement shall contain at least the procedures which govern the determination of the benchmark in periods of stress or periods where transaction data sources may be insufficient, inaccurate or unreliable and the potential</p>	<p>Certain external events can make it difficult or impossible to trade securities on certain Stock Exchanges. In such circumstances it may be impossible for STOXX Ltd. to follow its prescribed methodology. Where a period of stress is only temporary, e.g. an exchange outage, then the input price used for a constituent will default to the last traded price. Where an affected constituent continues to trade on another venue, the benchmark may no longer be an accurate representation of the economic reality. Where a period of stress is more prolonged, then a Limitation has occurred and the IGC will then exercise Discretion in how to rectify it. In exercising Discretion, the IGC will ensure that any decisions taken will ensure the preservation of market integrity and the reliability of the benchmark by avoiding any undue</p>

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1.10 Procedures for dealing with errors	Art. 27(2)(f) BMR	<p>limitations of the benchmark in such periods.</p> <p>A benchmark statement shall contain at least the procedures for dealing with errors in input data or in the determination of the benchmark, including when a re-determination of the benchmark is required.</p>	<p>market impact thus minimising any potential Limitations. All decisions taken by the IGC will be communicated to stakeholders on a timely basis by notification and by announcement on the STOXX website. If the conditions are expected to persist for a long period of time an index consultation, as outlined in Statement 1.6, may need to be enacted.</p> <p>The STOXX Bond Index Family is recalculated without delay whenever an error in Input Data is detected and it is technically and operationally feasible to do so. An index may need to be suspended whilst an error is being investigated and corrected. All users of the benchmark are notified immediately of any occurrence that leads to a suspension and further notified prior to an index resumption. Where a re-determination occurs, users are fully notified when the index re-determination has been applied retrospectively.</p>
1.11 Identification of potential limitations	Art. 27(2)(g) BMR; Art. 1(3) RTS	<p>A benchmark statement shall contain at least the identification of potential limitations of the benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs.</p> <p>In defining the potential limitations of the benchmark [and the circumstances in which the measurement of the market or economic reality may become unreliable, the</p>	<p>Potential Limitations in the STOXX Bond Index Family occur can occur during periods of market stress as outlined in Statement 1.9. However, Limitations may occur due to technical reasons, for example the inability to publish a close price due to a computer outage.</p>

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		<p>benchmark statement shall include at least:</p>	
		<p>(a) a description of the circumstances in which the administrator would lack sufficient input data to determine the benchmark in accordance with the methodology;</p>	<p>(a) STOXX uses ICE Data Services evaluated pricing for calculation of all bonds. Evaluated pricing ensures that all family members have sufficient Input Data to enable the value of all financial instruments and their associated pay-offs to be determined.</p>
		<p>(b) where relevant, a description of instances when the accuracy and reliability of the methodology used for determining the benchmark can no longer be ensured, such as when the administrator deems the liquidity in the underlying market as insufficient;</p>	<p>(b) Evaluated pricing ensures the accuracy and reliability of bond prices even in illiquid or fragmented markets.</p>

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1.12 ISINs	Art. 1(1)(b) RTS	<p>(c) any other information that administrator reasonably considers to be relevant or useful to help users and potential users to understand the circumstances in which the measurement of the market or economic reality may become unreliable, including a description of what might constitute an exceptional market event.</p> <p>The benchmark statement shall state, where available, the international securities identification number (ISIN) of the benchmark or benchmarks; alternatively, for a family of benchmarks, the statement may provide details of where the ISINs are publicly accessible free of charge;</p>	<p>(c) Benchmarks in the Bond Index Family may become unreliable due to an exceptional market event that causes a significant proportion of the underlying bonds which comprise an underlying index to become suspended from trading for reasons such as nationalisation, insolvency or administration. Where an exceptional market event occurs; STOXX will use discretion, as detailed in Section 1.3, to ensure that the exceptional market event is dealt with in a way that best reflects the economic or market reality that the affected benchmarks aim to measure.</p> <p>STOXX assigns ISIN codes to all Benchmarks, these numbers are freely available and can be found in the Vendor Code sheet on the STOXX website, https://www.stoxx.com/data-vendor-codes.</p>

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1.13 Contributions	Art. 1(1)(c) RTS	The benchmark statement shall state whether the benchmark, or any benchmark in the family of benchmarks, is determined using contributions of input data;	The STOXX Bond Index Family uses as Input Data bond prices sourced from ICE Data Services.
1.14 Type of benchmark	Art. 1(1)(d) RTS	The benchmark statement shall state whether the benchmark or any benchmark in the family of benchmarks qualifies as one of the types of benchmarks listed under Title III of Regulation (EU) 2016/1011, including the specific provision by virtue of which the benchmark qualifies as that type.	The STOXX Bond Index Family does not include an Interest Rate Benchmark under Article 3(1) (22), neither does it include a Commodity Benchmark under Article 3(1) (23) nor a Regulated Data Benchmark as some prices are sourced from Trading Venues other than those prescribed under Article 3(1) (24)(a) BMR.
<p>2. Specific Disclosure requirements for regulated data benchmarks</p>			
	Art. 2 RTS	<p>In addition to the information to be included pursuant to Article 1, for a regulated-data benchmark or, where applicable, family of regulated-data benchmarks, the benchmark statement shall state at least the following in</p>	

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		its description of the input data:	
2.1 Sources of input data	Art. 2(a) RTS	the source(s) of the input data used	Not Applicable.
2.2 Type of input data source	Art. 2(b) RTS	for each source, the relevant type, as listed in Article 3(1) (24) of Regulation (EU) 2016/1011	Not Applicable.
 3. Specific Disclosure requirements for interest rate benchmarks			
	Art. 3 RTS	In addition to the information to be included pursuant to Article 1, for an interest rate benchmark or, where applicable, family of interest rate benchmarks, the benchmark statement shall include at least the following information:	
3.1 Application of Annex I BMR	Art. 3(a) RTS	a reference alerting users to the additional regulatory regime applicable to interest rate	Not Applicable.

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		benchmarks under Annex I to Regulation (EU) 2016/1011	
3.2 Compliance with Annex I BMR	Art. 3(b) RTS	a description of the arrangements that have been put in place to comply with that Annex.	Not Applicable.
4. Specific disclosure requirements for commodity benchmarks			
	Art. 4 RTS	In addition to the information to be included pursuant to Article 1, for a commodity benchmark or, where applicable, family of commodity benchmarks, the benchmark statement shall at least:	
4.1 Application of Title II or Annex II BMR	Art. 4(a) RTS	indicate whether the requirements of Title II of, or Annex II to, Regulation (EU) 2016/1011 apply to the benchmark, or family of benchmarks as prescribed by Article 19 of that Regulation;	Not applicable.
4.2 Explanation for	Art. 4(b) RTS	include an explanation as to why Title II of or, as the case	Not applicable.

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application of Title II or Annex II BMR		may be, Annex II to that Regulation applies	
4.3 Definitions of relevant underlying physical commodity	Art. 4(c) RTS	include in the definitions of key terms a concise description of the criteria that define the relevant underlying physical commodity;	Not applicable.
4.4 Place of publication of explanations subject to paragraph 7 of Annex II BMR	Art. 4(d) RTS	where applicable, indicate where the explanations are published that the administrator is required to publish under paragraph 7 of Annex II to that Regulation	Not applicable.
5. Specific disclosure requirements for critical benchmarks			
	Art. 5 RTS	In addition to the information to be included pursuant to Article 1, for a critical benchmark, or, where applicable, a family of benchmarks that contains at least one critical benchmark, the benchmark statement shall	

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		include at least the following information:	
5.1 Reference regarding application of enhanced regulatory regime	Art. 5(a) RTS	a) references alerting users to the enhanced regulatory regime applicable to critical benchmarks, under Regulation (EU) 2016/1011;	Not applicable.
5.2 Way of information of any delay in publication	Art. 5(b) RTS	b) a statement indicating how users will be informed of any delay in the publication of the benchmark or of any re-determination of the benchmark, and indicating the (expected) duration of measures.	Not applicable.
6. Additional Information			
	Art. 1(8) RTS	Administrators may include additional information at the end of their benchmark	Full methodology documents as well as vendor reference codes for all component members of the STOXX Bond Index Family can be found on www.stoxx.com/resources .

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		statement provided that, if this is done by referring to a published document containing the information, the document shall be one that is accessible free of charge.	
7. Key Term Definitions			
	Art. 27(2) BMR	A benchmark statement shall contain at least: the definitions for all key terms relating to the benchmark.	See below for Glossary of Key Terms

Glossary of Key Terms

<u>Key Term</u>	<u>Definition</u>
Gross Return Index	Shall mean an Index in which coupon payments are fully reinvested. Gross Return Indices are labelled accordingly in the Vendor Code Sheet.
Input Data	Shall mean the data in respect of the value of one or more Constituent Elements, or prices, including estimated prices, quotes, committed quotes or other values, used by STOXX to determine an Index.
Insufficient Rule	Shall mean 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 Constituent Elements to fulfil the requirements of the Index Methodology; or

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	market disruption which results in the performance of the Index being unable to be tracked.
Limitation	<p>Shall refer to circumstances where the Index Methodology contains an Insufficient Rule or Unclear Rule or if it fails to produce Index Values as intended. Examples:</p> <p>Data Insufficiency;</p> <p>Extreme Market Events.</p>
Net Return Index	Shall mean an Index in which dividend payments are fully reinvested, calculated with a dividend minus STOXX Withholding Tax. Net Return Indices are labelled accordingly in the Vendor Code Sheet.
Price Index	Shall mean an Index which measures the price(s) of constituents and where dividend payments/coupon payments are not invested into the Index. All Price Indices are labelled accordingly in the Vendor Code Sheet.
Trading Venue	Shall have exchanges and other trading platforms.
Unclear Rule	Shall mean a situation in which a rule leaves multiple possible interpretation on how it shall be applied to a specific situation.
Vendor Code Sheet	Shall mean a sheet which contains information on certain Indices, <i>inter alia</i> the applicable Dissemination Calendars, which are available under https://www.stox.com/data-vendor-codes .