

# STOXX BENCHMARK STATEMENT STOXX BOND INDEX FAMILY



| Regulation Clause  | Regulation Subclause  | Required Information   | STOXX LTD Statement  |
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| <b>1. General Disclosure Requirements</b>  |   |  |  |
| 1.1 Date of Publication  | Art. 1(1)(a) Commission Delegated Regulation (EU) 2018/1643 ("RTS")                       | The benchmark statement shall state: the date of publication of the statement and the date of the most recent statement update.  | <p><b>Date of Publication</b><br/>August 2019</p> <p><b>Date of Update</b><br/>Not Applicable</p>  |
| 1.2 Definition of the market or economic reality and circumstances in which such measurement may become unreliable | Art. 27(1)(3) of Regulation (EU) 2016/1011 (" <b>BMR</b> "); Art. 1(2) RTS; Art. 1(3) RTS | 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><b>Definition of market or Economic Reality</b></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"> <li>- they are calculated on a price only basis,</li> <li>- they are calculated on a total return basis with reinvestment of coupon income.</li> </ul> |

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| 1.3 Discretion    | Art. 27(1)(3)(b) BMR | <p>The benchmark statement shall lay down technical specifications that clearly and unambiguously identify the elements of the calculation of 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><b>Circumstances in which such measurement may become unreliable:</b></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> <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 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. 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 and regulatory functions.</p> |

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| 1.4 Notice regarding changes to, or the cessation of, the benchmark                     | Art. 27(1)(3)(c) BMR             | 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.  | 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.  |
| 1.5 Advice concerning material changes to financial contracts and financial instruments | Art. 27(1)(3)(d) BMR             | The benchmark statement shall advise users that changes to, or the cessation of, the benchmark may have an impact upon the financial contracts and financial instruments that reference the benchmark or the measurement of the performance of investment funds. | 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 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. |
| 1.6 Rationale; review and approval procedures   | Art. 27(2)(b) BMR; Art. 1(5) RTS | A benchmark statement shall contain at least, the rationale for adopting the benchmark methodology and procedures for the review and approval of the methodology.<br><br>In specifying the procedures for  | <p><b>Rationale for adopting the benchmark methodology:</b></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>   |

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|   |                              | <p>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><b>Procedures for review of the methodology:</b></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><b>Procedures for public consultations:</b></p> <p>Any methodology changes that are deemed material ones 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 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><b>1.7 Criteria and procedures used to determine the benchmark</b></p> | <p>Art. 27(2)(c)<br/>BMR</p> | <p>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</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. All calculations, criteria and procedures used in the rebalancing of index family members is clearly shown in the relevant section of each family member’s manual.</p>   |

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| 1.8 Controls and rules that govern any exercise of judgement or discretion | Art. 27(2)(d) BMR; Art. 1(4) RTS | <p>of any models or methods of extrapolation and any procedure for rebalancing the constituents of a benchmark's index;</p> <p>The benchmark statement shall include the controls and rules that govern any exercise of judgement or discretion by the administrator or any contributors, to ensure 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>The circumstances that may cause an exercise of judgement or discretion as well as the controls and policies that govern any exercise of judgement are as set out above in Statement 1.3. STOXX keeps a written record of all circumstances in which judgement has been used by the IOC, IMC and, if applicable, any comments from the IGC.</p> |

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| <b>1.9 Determination in periods of stress</b>       | Art. 27(2)(e) BMR                | The benchmark shall include 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 limitations of the benchmark in such periods. | Certain external events can make it difficult or impossible to trade bonds. Examples of such events include: government restrictions on the repatriation of international capital; imposition of sanctions upon a country which prevents new investment. By their very nature, the course of these events is often uncertain. In dealing with these issues the IOC, IMC or IGC will ensure that any decisions taken 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 and index consultation, as outlined in Statement 1.6, may need to be enacted. |
| <b>1.10 Procedures for dealing with errors</b>      | Art. 27(2)(f) BMR                | The benchmark shall also include 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.   | 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.  |
| <b>1.11 Identification of potential limitations</b> | Art. 27(2)(g) BMR; Art. 1(3) RTS | The benchmark shall include the identification of potential limitations of the benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs.   | 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.   |

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|                   |                      | <p>In defining the potential limitations of the benchmark [and the circumstances in which the measurement of the market or economic reality may become unrealizable, 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;</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</p>             | <p>(b) Evaluated pricing ensures the accuracy and reliability of bond prices even in illiquid or fragmented markets.</p>  |



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|                   |                      | <p>the liquidity in the underlying market as insufficient;</p> <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 unrealizable, including a description of what might constitute an exceptional market event.</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> |
| 1.12 ISINs        | Art. 1(1)(b) RTS     | The benchmark statement shall include, 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   | STOXX assigns ISIN codes to all Benchmarks, these numbers are freely available and can be found in the Vendor Code spreadsheet on the STOXX website.   |

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|                        |                      | ISINs are publicly accessible free of charge;   |  |
| 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 is not a Regulated Data Benchmark, some prices are sourced from trading venues other than those prescribed under Article 3(1) (24)(a) BMR. |

**2. Specific Disclosure requirements for regulated data benchmarks**

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|  | Art. 2 RTS           | <p><b>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 its description of the input data:</b></p> |                     |
| 2.1 Sources of input data  | Art. 2(a) RTS        | a) the source(s) of the input data used   | Not Applicable.     |
| 2.2 Type of input data source  | Art. 2(b) RTS        | b) for each input source, the relevant type of input data used, as listed in Article 3(1) (24) of Regulation (EU) 2016/1011   | Not Applicable.     |
| <p><b>3. Specific Disclosure requirements for interest rate benchmarks</b></p> |                      |   |                     |
|  | Art. 3 RTS           | <p><b>In addition to the information to be included pursuant to Article 1, for an interest rate</b></p>   |                     |

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| 3.1 Application of Annex I BMR                                      | Art. 3(a) RTS        | <p><b>benchmark or, where applicable, family of interest rate benchmarks, the benchmark statement shall include at least the following information:</b></p> <p>a) a reference alerting users to the additional regulatory regime applicable to interest rate benchmarks under Annex I to Regulation (EU) 2016/1011</p> | Not Applicable.     |
| 3.2 Compliance with Annex I BMR                                     | Art. 3(b) RTS        | <p>b) a description of the arrangements that have been put in place to comply with that Annex.</p>   | Not Applicable.     |
| <p>4. Specific disclosure requirements for commodity benchmarks</p> |                      |  |                     |
|   | Art. 4 RTS           | <p><b>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</b></p>  |                     |

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|   |                      | <b>least:</b>  |                     |
| 4.1 Application of Title II or Annex II BMR                 | Art. 4(a)<br>RTS     | a) 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 application of Title II or Annex II BMR | Art. 4(b)<br>RTS     | b) include an explanation as to why Title II of or, as the case may be, Annex II to that Regulation Applies  | Not applicable.     |
| 4.3 Definitions of relevant underlying physical commodity   | Art. 4(c)<br>RTS     | c) 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            | Art. 4(d)<br>RTS     | d) where applicable, indicate where the explanations are published that the  | Not applicable.     |

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| to paragraph 7 of Annex II BMR                                    |                      | administrator is required to publish under paragraph 7 of Annex II to that Regulation  |                     |
| 5. Specific disclosure requirements for critical benchmarks       |                      |  |                     |
|   | Art. 5 RTS           | <p><b>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 include at least the following information:</b></p> |                     |
| 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.     |

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| 5.2 Way of information of any delay in publication | Art. 5(b)<br>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)<br>RTS     | Administrators may include additional information at the end of their benchmark 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. | Full methodology documents as well as vendor reference codes for all component members of the STOXX Bond Index Family can be found on <a href="http://www.stoxx.com/resources">www.stoxx.com/resources</a> . A list of key terms relating to benchmarks can be found in the STOXX General Guide on <a href="http://www.stoxx.com/rulebooks">www.stoxx.com/rulebooks</a> . |
| 7. Key Term Definitions                            |                      |  |   |

STOXX Benchmark Statement STOXX Bond Indices

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|                   | Art. 27(2)<br>BMR    | <b>A benchmark statement shall contain at least: the definitions for all key terms relating to the benchmark.</b> | See comments in section 6. |