Tokyo Swap Rate (for swaps referencing TONA) Benchmark

Tokyo Swap Rate Fallback Benchmark

v1.0



This benchmark statement is provided by FTSE International Limited as the administrator of the Tokyo Swap Rate (for swaps referencing TONA) and the Tokyo Swap Rate Fallback. It is intended to meet the requirements of EU Benchmark Regulation (EU2016/1011) and the supplementary regulatory technical standards and the retained EU law in the UK (The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019.

The benchmark statement should be read in conjunction with the Tokyo Swap Rate (for swaps referencing TONA) and the Tokyo Swap Rate Fallback Methodology and other associated policies and methodology documents. Those documents are italicised whenever referenced in this benchmark statement and are included as an Appendix to this document. They are also available on the FTSE Russell website (www.lseg.com/en/ftse-russell/).

References to "BMR" or "EU BMR" in this benchmark statement refer to <u>Regulation (EU) 2016/1011 of the European Parliament and of</u> the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds.

References to "DR" in this benchmark statement refer to <u>Commission Delegated Regulation (EU) 2018/1643 of 13 July 2018</u> supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council with regard to regulatory technical standards specifying further the contents of, and cases where updates.

References to "UK BMR" in this benchmark statement refer to <u>The Benchmarks (Amendment and Transitional Provision) (EU Exit)</u> <u>Regulations 2019</u>.

Ref	Regulatory requirement	FTSE International Limited's response
1. General information		
1.1 Date of publication and last update DR 1(1)(a)	The benchmark statement shall state the date of publication of the statement and, where applicable, the date of its last update.	Date of publication First published October 2021 ¹ Date of last update April 2022
1.2 Review of benchmark statement BMR27(1)	The administrator shall review and, where necessary, update the benchmark statement for each benchmark or family of benchmarks in the event of any changes to the information to be provided under this article and at least every two years.	FTSE International Limited is the administrator of the Tokyo Swap Rate ² (for swaps referencing TONA) benchmark and the Tokyo Swap Rate Fallback benchmark. FTSE International Limited will review this benchmark statement regularly (at least once every two years) or whenever there are material changes to the information provided.
1.3 Use of ISIN DR 1(1)(b)	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.	FTSE International Limited does not currently assign ISINs to all of the indices for which it is the administrator.
1.4 Contributions of input data DR 1(1)(c)	The benchmark statement shall state whether the benchmark or any benchmark in the family of benchmarks is determined using contributions of input data.	The TSR (for swaps referencing TONA) benchmark and the TSR Fallback benchmark does not use contributions of input data. Refer to 2.7 for further detail on input data.
1.5 Regulated-data benchmark disclosures DR 1(1)(d) DR 2	Specific disclosure requirements for regulated-data benchmarks. The benchmark statement shall state whether the benchmark or any benchmark in the family of benchmarks qualifies as a regulated-data benchmark including the specific provision by which the benchmark qualifies as that type, as listed under Title III of BMR. 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:	TSR (for swaps referencing TONA) benchmark and the TSR Fallback are not regulated-data benchmarks for the purposes of UK BMR or EU BMR. Some input data is sourced from venues other than those specified in Article 3(1)(24)(a) of EU BMR. TSR (for swaps referencing TONA) and the TSR Fallback are readily available data benchmark.

¹ Prior to December 2024 Refinitiv Benchmark Services (UK) Limited (RBSL) was the Administrator of the Tokyo Swap Rate (for swaps referencing TONA) benchmark and the Tokyo Swap Rate Fallback benchmark ²/₂Tokyo Swap Rate" is abbreviated as "TSR" throughout this benchmark statement

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	 indicate the benchmark's qualification as a regulated-data benchmark; the source of the input data used; and for each source, the relevant type, as listed in Article 3(1)(24) of Regulation (EU) 2016/1011. 	
1.6 Significant and non-significant benchmarks disclosure	Specific disclosure requirements for significant and non-significant benchmarks.	TSR (for swaps referencing TONA) is a "non-significant benchmark" for the purposes of UK BMR and EU BMR.
DR 1(1)(d)	The benchmark statement shall state whether the benchmark or any benchmark in the family of benchmarks qualifies as a significant or non-significant benchmark including the specific provision by which the benchmark qualifies as that type, as listed under Title III of BMR.	The TSR Fallback is a "significant benchmark" for the purposes of UK BMR and EU BMR.
2. Content		
2.1 Market reality BMR27(1)(a)	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.	TSR (for swaps referencing TONA) is a twice-daily benchmark for overnight index swaps ("OIS") referencing JPY TONA. The TONA OIS market exists primarily within Japan.
		The TSR Fallback is a fallback rate for legacy financial products that referenced the Tokyo Swap Rate (for swaps referencing 6-month JPY interbank offered rates from London banks) for use after the cessation or non-representativeness of JPY LIBOR by stakeholders that elect to use it.
		TSR (for swaps referencing TONA) and the TSR Fallback are published on each Tokyo business day with a morning and afternoon setting and with the following tenors: 1 year, 18 months, 2-10 years, 12 years, 15 years, 20 years, 25 years, 30 years and 40 years.
		Details of the calculation methodologies employed are set out in the <i>Tokyo Swap Rate</i> and <i>Fallback Methodology</i> .
2.2 Use of discretion BMR27(1)(b)	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	No expert judgment or discretion is exercised by FTSE International Limited in the determination of TSR (for swaps referencing TONA) and the TSR Fallback.

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	that can exercise discretion, and how such discretion may be subsequently evaluated.	
2.3 External factors BMR27(1)(c)	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.	FTSE International Limited hereby provides notice to users of TSR (for swaps referencing TONA) and the TSR Fallback that it is possible that circumstances, including external events beyond the control of FTSE International Limited, may necessitate changes to or cessation of the benchmark.
		Further information about such factors is detailed in the <i>Index Series Decommissioning Statement</i> .
2.4 Changes to/cessation of benchmark BMR27(1)(d)	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.	Changes to, or the cessation of, TSR (for swaps referencing TONA) and/or the TSR Fallback may have an impact upon any financial contracts and financial instruments that reference TSR (for swaps referencing TONA) and/or the TSR Fallback or the measurement of the performance of investment fund that use or refer to the benchmark. Any financial contracts or other financial instruments that reference the benchmark or investment funds that use TSR (for swaps referencing TONA) or the TSR Fallback to measure their performance should be able to withstand, or otherwise address the possibility of changes to, or cessation of, the index series family.
2.5 Definitions of key terms BMR27(2)(a)	A benchmark statement shall contain at least the definitions for all key terms relating to the benchmark.	The definitions of all key terms relating to the TSR (for swaps referencing TONA) and the TSR Fallback can be found in the <i>Tokyo Swap Rate and Fallback Methodology</i> .
DR 1(2)	 In defining the market or economic reality, the benchmark statement shall contain at least the following information: a general description of the market or economic reality; the geographical boundaries, if any, of the measured market or economic reality; and any other information the administrator reasonably considers to be relevant or useful for a benchmark user or potential user to understand the relevant features of the market or economic reality. Subject to the availability of reliable data, the administrator shall consider including, at least: information on actual or potential participants in the market; and 	 Description of market/economic reality Refer to 2.1. Geographical boundaries TSR (for swaps referencing TONA) is a twice-daily benchmark for overnight index swaps ("OIS") referencing JPY TONA. The TONA OIS market exists primarily within Japan. Any other relevant information Not applicable to this benchmark.

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	2. an indication of the size of the market or economic reality.	
2.6 Benchmark methodology BMR27(2)(b)	A benchmark statement shall contain at least the rationale for adopting the benchmark methodology and procedures for the review and approval of the methodology.	The <i>TSR</i> (for swaps referencing TONA) and the <i>TSR</i> Fallback Methodology has been adopted as being a reliable and resilient means for providing a benchmark that accurately represents OIS referencing JPY TONA over the relevant forward-looking tenors and provide fallback rates for stakeholders that elect to use it.
Changes and cessation to benchmark methodology DR 1(5)	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.	The <i>TSR</i> (for swaps referencing TONA) and <i>TSR</i> Fallback Methodology is subject to a review in order to assess its ongoing fitness for purpose on at least an annual basis. In the event that the review leads the administrator to believe that a change to the methodology is required and that the change is material in its effect on the benchmark, a market consultation will be conducted in accordance with the FTSE Russell <i>Policy</i> for Benchmark Methodology Changes in order to seek feedback from a representative range of stakeholders.
		The administrator will review all feedback. Following such review, if the proposed change or changes are approved by the FTSE Russell Index Governance Board, the administrator will provide sufficient notice to users of TSR (for swaps referencing TONA) and the TSR Fallback before implementing such change or changes.
2.7 Input data BMR27(2)(c)	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.	The TSR (for swaps referencing TONA) benchmark is calculated using Level 1 of the waterfall subject to a threshold. If the threshold is not reached, the benchmark is calculated using Level 2 of the waterfall subject to a second threshold. If the second threshold is not met, "No Fix" is published for the relevant tenor or tenors. The Level 1 and Level 2 thresholds have been calibrated to ensure a sufficient quantity of eligible input data.
		The waterfall is applied individually to each tenor of the benchmark. Consequently, it is possible that different tenors are determined using different levels of the waterfall on the same day.
		Input data for Level 1 of the TSR (for swaps referencing TONA) benchmark is taken from a dealer-to-client trading platform, Tradeweb. Input data comprises quotes from each dealer captured every 30 seconds over 20 minute windows from 09:50 to 10:10 Tokyo time for the morning setting and 14:40 to 15:00 Tokyo time for the afternoon

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		setting. The precise time of capture within each 30 second period varies. Quotes are captured 40 times over each 20 minute window.
		A mid-rate is calculated using each valid bid rate and offer rate pair. The TSR (for swaps referencing TONA) benchmark is then determined as the median rate of the mid-rates. The threshold for use of Level 1 in the determination of the TSR (for swaps referencing TONA) benchmark is that at least 160 valid mid-rates are available and that these rates comprise at least a minimum number of valid mid-rates from each of a minimum number of separate dealers.
		Input data for Level 2 of the benchmark comprises indicative rates for spot starting TONA OIS contracts cleared by the JSCC taken from two inter-dealer brokers (Tradition and TP ICAP) and Tradeweb (composite rates). In addition, any dealer quotes from Tradeweb that are available but collectively are insufficient to meet the threshold for Level 1 for a specific tenor of the benchmark will be included as input data for Level 2.
		For Level 2, indicative quotes from the inter-dealer brokers and Tradeweb and any available dealer quotes from Tradeweb are captured every 30 seconds over 20 minute windows from 09:50 to 10:10 Tokyo time for the morning setting and 14:40 to 15:00 Tokyo time for the afternoon setting. The precise time of capture within each 30 second period varies.
		In order to be valid, each inter-dealer bid rate to offer rate must be less than or equal to a maximum spread that is specified for each tenor. Dealer quotes are subject to the same maximum bid to offer and minimum notional amount criteria as used in Level 1.
		A mid-rate is calculated using each valid bid rate and offer rate pair. The TSR (for swaps referencing TONA) benchmark is then determined as the median rate of the mid-rates. The threshold for use of Level 2 in the determination of the TSR (for swaps referencing TONA) benchmark is either that (A) 60 valid indicative mid-rates from any combination of Tradition, TP ICAP and Tradeweb (composite rates) are captured, <u>or</u> (B) (i) at least 40 valid indicative mid-rates from any combination of Tradition rates) and (ii) at least 90 valid mid-rates from dealer quotes (comprising at least a minimum number of valid mid-rates from each of a minimum number of separate dealers) are captured.
		Quotes and rates for both levels are captured for spot starting TONA OIS contracts cleared by the JSCC in respect of each tenor of the benchmark.

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		The TSR Fallback uses TSR (for swaps referencing TONA) benchmark settings of the corresponding tenor as input data. The constant JPY LIBOR ISDA 6 month spread adjustment is used in the determination of the TSR Fallback benchmark.
		TSR (for swaps referencing TONA) and the TSR Fallback are published for the morning setting at approximately 10:30 Tokyo time and for the afternoon setting at approximately 15:30 on each Tokyo business day. Both benchmarks are published as percentages rounded to three decimal places.
		No models or method of extrapolation or interpolation are used by FTSE when determining TSR (for swaps referencing TONA) in accordance with Level 1 or Level 2 of the waterfall or the TSR Fallback. The benchmarks are not determined by means of a portfolio of constituents.
2.8 Controls over exercise of judgement/discretion BMR27(2)(d)	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 consistency in the use of such judgement or discretion.	No expert judgment or discretion is exercised by FTSE International Limited in the determination of FTSE Term SONIA.
DR 1(4)	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.	Not applicable.
2.9 Determination of the benchmark in stress periods BMR27(2)(e)	A benchmark statement shall contain at least the procedures that 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.	An extreme market event may lead to a loss of liquidity on the platforms that supply input data, preventing the thresholds for Level 1 and Level 2 of the waterfall from being reached and resulting in the publication of "No Fix" for affected tenors.

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2.10 Errors in input data BMR27(2)(f)	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.	If following publication, a material error is identified in the input data or the determination of any tenor of a benchmark setting before 11:30am Tokyo time for the morning setting or 16:30 Tokyo time for the afternoon setting, FTSE will refix the affected tenor(s) of the benchmark. A material error is one that has an impact of one-tenth of one basis point or more on the published benchmark.
2.11 Potential limitations BMR27(2)(g)	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.	TSR (for swaps referencing TONA) is calculated using Level 1 of the methodology subject to a threshold. If the threshold is not reached, TSR (for swaps referencing TONA) is calculated using Level 2 of the methodology subject to a second threshold. If the second threshold is not reached, "No Fix" is published for the affected tenors of TSR (for swaps referencing TONA).
		The TSR Fallback is calculated using the corresponding tenor of TSR (for swaps referencing TONA). If TSR (for swaps referencing TONA) is not published, "No Fix" is published for the TSR Fallback.
		Determination of TSR (for swaps referencing TONA) is dependent on receiving sufficient input data from the input data sources for each benchmark tenor. Technical problems or extreme market events may lead to insufficient input data for either level of the waterfall, resulting in publication of a "No Fix". Determination of the TSR Fallback is dependent solely on the determination of the TSR (for swaps referencing TONA) benchmark.
		The design of the benchmarks is therefore resilient in a wide range of market conditions. However, an extreme market event may lead to a loss of liquidity in the underlying TONA OIS market inhibiting the availability of sufficient input data for the determination of the benchmarks to the extent that a "No Fix" is issued.
circu mark bencl 1. a a t	In defining the potential limitations of the benchmark and the circumstances in which the measurement of the relevant market or economic reality may become unreliable, the benchmark statement shall include at least: 1. a description of the circumstances in which the	 Level 1 and Level 2 of the methodology's waterfall have thresholds that must be satisfied in order for Level 1 or Level 2 to be used in the determination of TSR (for swaps referencing TONA). Such threshold (as described above) defines the minimum required input data. If neither is satisfied, "No Fix" is published for TSR (for swaps referencing TONA) and the TSR Fallback.
	administrator would lack sufficient input data to determine the benchmark according to the methodology;where relevant, a description of instances when the	 2. TSR (for swaps referencing TONA) and the TSR Fallback are considered to be reliable provided that: there is liquidity in the market for TONA OIS cleared by JSCC, and

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	 determining the benchmark can no longer be ensured, such as when the administrator deems the liquidity in the underlying market as insufficient; and any other information that the 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 events. 	 the input data from the sources (Tradeweb, Tradition and TP ICAP) are representative of this TONA OIS liquidity. Both conditions should be satisfied in order for TSR (for swaps referencing TONA) and the TSR Fallback to be reliable reference rates for TONA OIS rates and fallbacks rates respectively over the relevant tenors.
3. Review and update of bench	mark statements	
3.1 Review and update of benchmark statement DR 6	 An update of the benchmark statement shall be required whenever the information contained in the statement ceases to be correct or sufficiently precise and including in any event in the following cases: 1. whenever there is a change in the type of the benchmark; and 2. whenever there is a material change in the methodology used for determining the benchmark or, if the benchmark statement is for a family of benchmarks, in the methodology used for determining any benchmark within the family of benchmarks. 	This benchmark statement is subject to regular review (at least once every two years) or whenever there are material changes to the methodology by FTSE to ensure that the benchmark statement is correct and sufficiently precise.
4. Disclosures		
4.1 Interest rate benchmarks disclosure DR 1 (1)(d)	Specific disclosure requirements for interest rate benchmarks. The benchmark statement shall state whether the benchmark or any benchmark in the family of benchmarks qualifies as an interest rate benchmark including the specific provision by which the benchmark qualifies as that type, as listed under	Not applicable to TSR (for swaps referencing TONA) and the TSR Fallback.
DR 3	Title III of BMR. 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:	

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	 a reference alerting users to the additional regulatory regime applicable to interest rate benchmarks under Annex I to Regulation (EU) 2016/1011; and a description of the arrangements that have been put in place to comply with that annex. 	·
4.2 Commodity benchmarks	Specific disclosure requirements for commodity benchmarks.	Not applicable to TSR (for swaps referencing TONA) and the TSR Fallback.
disclosure	The benchmark statement shall state whether the benchmark or any benchmark in the family of benchmarks qualifies as	
DR 1 (1)(d)	commodity benchmark including the specific provision by which the benchmark qualifies as that type, as listed under Title III of BMR.	
DR 4	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:	
	 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; include an explanation as to why Title II of or, as the case may be, Annex II to that regulation applies; include in the definitions of key terms a concise description of the criteria that define the relevant underlying physical commodity; and where applicable, indicate where the explanations are published that the administrator is required to publish under paragraph 7 of Annex II to that regulation. 	
4.3 Critical benchmarks disclosure	Specific disclosure requirements for critical benchmarks.	Not applicable to TSR (for swaps referencing TONA) and the TSR Fallback.
DR 1(1)(d)	The benchmark statement shall state whether the benchmark or any benchmark in the family of benchmarks qualifies as a critical benchmark including the specific provision by which the benchmark qualifies as that type, as listed under Title III of BMR.	
DR 5	In addition to the information to be included pursuant to Article 1, for a critical benchmark, or, where applicable, a family of	

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	benchmarks that contains at least one critical benchmark, the benchmark statement shall include at least the following information:	
	 a reference alerting users to the enhanced regulatory regime applicable to critical benchmarks under Regulation (EU) 2016/1011; and a statement indicating how users will be informed of any delay in the publication of the benchmark or of a re-determination of the benchmark and indicating the (expected) duration of measures. 	
4.4 EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks	Specific disclosure requirements for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks.	Not applicable to TSR (for swaps referencing TONA) and the TSR Fallback.
A19a		
A19b		
4.5 ESG factors disclosure	Specific disclosure requirements for ESG factors.	TSR (for swaps referencing TONA) and the TSR Fallback do not take account of ESG
A13 (1)(d)		factors in the index design and do not pursue any ESG objectives.
A27 (2a)		
4.6 Carbon emission reductions A27 2(a)	Disclosure of the alignment with the objectives of the Paris Agreement.	TSR (for swaps referencing TONA) and the TSR Fallback do not use any temperature scenario, do not align with the target of carbon emission reductions and do not attain the objectives of the Paris Agreement.

Appendix

Third Party Disclaimer

Bloomberg ISDA spread adjustments are used as an input into the TSR. BLOOMBERG is a trademark and service mark of Bloomberg Finance L.P. ("BFLP"). ISDA is a trademark and service mark of the International Swaps and Derivatives Association, Inc. ("ISDA"). Bloomberg Index Services Limited ("BISL" and, collectively with BFLP and their affiliates, "Bloomberg") maintains and calculates the 'fallback' data comprising the 'all in' fallback rates and their component parts, the adjusted 'risk-free' reference rates and the spread adjustment (collectively with any other data or information relating thereto or contained therein, the "Fallback Data") under an engagement between BISL and ISDA. Neither Bloomberg nor ISDA guarantees the timeliness, accurateness, completeness of, or fitness for a particular purpose with respect to, the Fallback Data and each shall have no liability in connection with the Fallback Data. Without limiting the foregoing, neither Bloomberg nor ISDA makes any representations regarding whether the Fallback Data would be appropriate for derivative or non-derivative financial instruments, including derivatives transacted outside of standard ISDA documentation and related protocols. Market participants are encouraged to consider and analyze the details of the Fallback Data and determine independently whether they would be appropriate for any such use.

Further Information

Further information is available on the <u>Tokyo Swap Rate website</u>. For questions and enquiries, please contact the administrator at index_queries@lseg.com.

This benchmark statement should be read in conjunction with the following Ground Rules, methodology and policy documents, which can be accessed using the links below:

Ground Rules

Tokyo Swap Rate and Fallback Methodology

Organisational policies <u>Governance Framework</u> <u>Index Series Decommissioning Statement</u> <u>Benchmark Administration Governance and Conflicts of Interest Management</u> Policy for Benchmark Methodology Changes

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