

Compliance with ‘Principles for Financial Benchmarks – Final Report – (“IOSCO Principles”)’
(Description on operational framework of JBA TIBOR)

(Executive Summary)

- ✧ The “Principles for Financial Benchmarks – Final Report – (“IOSCO Principles”)¹” published by the International Organization of Securities Commissions in July 2013 sets out that Benchmark Administrators should publicly disclose the extent of their compliance with the IOSCO Principles on an annual basis. In light of this, JBA TIBOR Administration² (“JBATA”) is pleased to announce the results of self-assessment on whether the operational framework of JBA TIBOR (a collective term representing the financial benchmarks calculated and published by JBATA; the same shall apply hereinafter) has been developed and implemented in compliance with the IOSCO Principles (the self-assessment base date: March 31, 2025).
- ✧ In consideration of the IOSCO Principles and international discussions aiming for the financial benchmark reforms at the Financial Stability Board (“FSB”) and other bodies, JBATA implemented the First Phase of JBA TIBOR reform on July 24, 2017. Based on this reform and the progress in subsequent discussions, JBATA evaluates that the operational framework of JBA TIBOR has been developed and implemented in compliance with the IOSCO Principles.
- ✧ While a remaining issue for Principle 7(Data sufficiency)³ was recognized from a perspective of further enhancing the transparency, robustness, and reliability of JBA TIBOR, JBATA considers that the issue has been resolved on the basis that the publication of all tenors of Euroyen TIBOR has permanently ceased at the end of December 2024. Therefore, as of the assessment base date, JBATA believes that there are no additional issues to be addressed under the IOSCO Principles.

¹ “Principles for Financial Benchmarks Final Report”
(<http://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf>)

² On April 1, 2014, JBATA was formed to establish a more independent and neutral administration framework for JBA TIBOR. JBA TIBOR calculation and publication operations were transferred from the General Incorporated Association Japanese Bankers Association on the same day and JBATA commenced its operation therefrom. With regard to the background relating to the establishment of JBATA, please see the “Report on the Review of JBA TIBOR Administration” released by the Japanese Bankers Association in December 2013
(https://www.zenginkyo.or.jp/fileadmin/res/en/news/news131227_1.pdf).

³ The low proportion of submission rates of Euroyen TIBOR determined by using data of the underlying market (i.e. the Japan Offshore Market) and the shrink in size of the Japan Offshore Market for a long time compared to the Japan unsecured call market (i.e. the underlying market of Japanese Yen TIBOR).

- ✧ Note that this assessment result reports the extent of JBA TIBOR's compliance with the IOSCO Principles as of the base date and does not assure that it will remain unchanged going forward. Taking into consideration that the extent of compliance is subject to changes according to, among other things, changes in an environment of JBA TIBOR's underlying market, JBATA will conduct a periodic self-assessment on an annual basis pursuant to the IOSCO Principles.
- ✧ JBATA will be committed to further enhancing the transparency, robustness and reliability of Japanese Yen TIBOR. For example, as of the assessment base date, JBATA understands the potential need to consider partial revisions to the waterfall methodology of Japanese Yen TIBOR (e.g. revision of the use of data in the Japan Offshore Market in the 2nd Level), and will update the progress of the discussion in our future self-assessment results.⁴

⁴ While such efforts to further enhance the transparency, robustness and reliability of Japanese Yen TIBOR are not recognized as issues to be addressed under the IOSCO Principles, we describe this as a matter related to Principle 6 (Benchmark Design).

<Compliance with the IOSCO Principles>

Governance

➤ Principle 1 Overall Responsibility of the Administrator

JBA TIBOR is a collective term representing the financial benchmarks calculated and published by JBATA. Of which, Japanese Yen TIBOR is a benchmark for short-term Japanese yen interest rates and is widely used as a representative benchmark for Japanese yen.

JBATA assumes overall responsibility for JBA TIBOR administration, including the definition of benchmarks, processes for determining benchmark and its governance arrangements. In addition, such processes and arrangements are prescribed in the JBA TIBOR Operational Rules and the JBA TIBOR Code of Conduct and are published on its website.

JBATA is designated as a specified financial benchmark administrator under the revised Financial Instruments and Exchange Act (“Act”), which took effect in May 2015 and is subject to regulation and supervision under the Act. Pursuant to the Act, which reflects the IOSCO Principles and requires specified financial benchmark administrators to develop “operational rules”, JBATA developed the JBA TIBOR Operational Rules, the JBA TIBOR Code of Conduct, the Guidelines on Outsourcing JBA TIBOR Calculation/Publication Operations, the Contingency Plan for JBA TIBOR Publication, the Conflict of Interest Management Policy and the Complaints Consultation Management Rule of JBATA (hereinafter collectively referred to as “JBA TIBOR Operational Rules, etc.”), and obtained approval from the Financial Services Agency of Japan (“FSA”) on November 26, 2015 (and these rules took effect on the same day).

Subsequently, JBATA partially revised the JBA TIBOR Operational Rules, etc. as part of the First Phase of JBA TIBOR reform, and obtained approval from the FSA on February 20, 2017 (and took effect on July 24, 2017).

JBATA also obtained approval from the FSA on March 24, 2023, to revise the JBA TIBOR Operational Rules and the Contingency Plan for JBA TIBOR Publication considering the “Results of Public Consultation on fallback issues for JBA TIBOR.” The revisions became effective on April 1, 2023.⁵

On October 30, 2024, JBATA obtained approval from the FSA to revise the JBA TIBOR

⁵ https://www.jbatibor.or.jp/english/news/revisions_Operational_Rules_20230401.html

Operational Rules, the JBA TIBOR Code of Conduct, the Contingency Plan for JBA TIBOR Publication and the Conflict of Interest Management Policy to reflect any changes arising from the permanent cessation of Euroyen TIBOR at the end of December 2024 (and these rules took effect on January 1, 2025⁶).

➤ Principle 2 Oversight of Third Parties

The following third parties are related to the calculation and publication of JBA TIBOR. The JBA TIBOR Operational Rules, the JBA TIBOR Code of Conduct and the Guidelines on Outsourcing JBA TIBOR Calculation/Publication Operations (“Outsourcing Guidelines”) stipulate policies and procedures for JBATA’s management or supervision of third parties and the following steps have been taken.

✓ Reference banks

Reference banks are supervised through monitoring in accordance with the JBA TIBOR Code of Conduct as described below.

- Monitoring of submission rates
- Monitoring of the establishment of internal rules
- Monitoring of the implementation of in-house training
- Monitoring of the results of internal and external audits
- On-site monitoring of the extent of compliance with the Code of Conduct

✓ Service provider (NTT DATA Corp.)

Policies and procedures for the management or supervision of the operations outsourced to NTT DATA Corp., which is the service provider are set out in the JBA TIBOR Operational Rules, the Outsourcing Guidelines and the Outsourcing Agreement. JBATA supervises NTT DATA Corp. through monitoring and other activities as follows:

- Pre-publication check of the rates and permission of official rates publications by JBATA
- Monitoring of the implementation of outsourced services, the establishment of processes and procedures for outsourced services, and recordkeeping of documents (records) by submitting reports regarding the execution of operations (quarterly)

✓ Backup organization (Osaka Bankers Association)

The operations outsourced to the Osaka Bankers Association which is the backup organization are provided in the JBA TIBOR Operational Rules, the Outsourcing

⁶ https://www.jbatibor.or.jp/english/news/revisions_to_jba_tibor_operational_rules_and_other_relevant_policies.html

Guidelines and the Agreement on Outsourced Operations. The Osaka Bankers Association is supervised through monitoring and other activities as follows:

- Monitoring of the implementation of outsourced services, the establishment of processes and procedures for outsourced services, and recordkeeping of documents (records) by submitting reports regarding the execution of operations (quarterly)

➤ Principle 3 Conflicts of Interest for Administrators

JBATA has established the JBA TIBOR Operational Rules, the JBA TIBOR Code of Conduct and the Conflict of Interest Management Policy identifying conflicts of interest that may arise in the course of JBA TIBOR administration and stipulating measures to manage and mitigate such conflicts of interest as described below. JBATA also posts these rules and policy on its website and takes these measures.

- The majority of the Board members of JBATA shall consist of persons who are working for or belonging to financial institutions
- The members of the Oversight Committee of JBATA shall be selected from persons other than those who are working for or belonging to financial institutions
- The revision of benchmark definitions specified in Article 4 of the JBA TIBOR Operational Rules and other significant matters shall be reviewed by the Oversight Committee
- To ensure the soundness of submissions rates provided by reference banks, the Code of Conduct shall be developed, and reference banks shall be required to establish internal frameworks and JBATA shall monitor their status of compliance with the frameworks
- An appropriate administration framework shall be maintained by, for example, limiting operations outsourced to the service provider to areas of relative simplicity, such as collection, calculation and publication
- The documents considered material in light of conflicts of interest management and the transparency of JBA TIBOR (e.g. relevant rules and audit results) shall be disclosed. If there is any individual case of a conflict of interest that is considered material to be disclosed to JBA TIBOR users, such a case shall be disclosed to those users. The Oversight Committee shall discuss whether to disclose such a case, with the final decision being made by the Board of Directors
- In respect of conflicts of interest, information shall be treated with the utmost care and be thoroughly managed on a case-by-case basis. JBATA requires that parties shall adopt adequate measures to manage conflicts of interest promptly and fairly. In particular, they shall consider establishing effective procedures to control the exchange of information between relevant persons who are involved in activities that give rise to risks of conflicts

of interests

- Management and employees of JBATA and members of the Planning Committee, Administration Committee and the Oversight Committee shall not divulge confidential information concerning JBATA's operations obtained in the course of their duties to third parties
- Management and employees of JBATA and members of the Planning Committee, Administration Committee and Oversight Committee shall not use information obtained concerning JBATA's operations for their own interests or for the interests of third parties
- JBATA shall establish a whistle-blowing system in order to detect manipulation and misconduct related to JBA TIBOR at an earlier stage
- JBATA shall ensure that remuneration plans for its management, employees and committee members are appropriately designed and implemented by giving due regard to risk management and compliance in order to avoid incentivizing manipulation of JBA TIBOR, for example not setting a JBA TIBOR-based remuneration

In addition, the Oversight Committee, which is exclusively comprised of experts who do not work for or belong to financial institutions (e.g. lawyers, CPAs and academics) assesses, through periodic monitoring, whether the above measures for managing conflicts of interest need to be reviewed, and conducts a review (between February and March every year).

Furthermore, statements of whether the Board members and the Oversight Committee members have conflicts of interest are collected from all of them and published on the website, disclosing information on the management of conflicts of interest, together with relevant rules, to users and related authorities.

➤ Principle 4 Control Framework for Administrators

JBATA assumes overall responsibility for the integrity of the calculation and publication of JBA TIBOR and has in place a governance framework needed to ensure the integrity and transparency of the benchmark administration.

The Board of Directors is formed as a decision-making body of JBATA. As prescribed by the JBA TIBOR Operational Rules, the majority of its members are being selected from the persons other than those who are working for or belonging to financial institutions.

Under the Board of Directors, the Oversight Committee is formed so that it is exclusively comprised of experts who do not work for or belong to financial institutions (e.g. lawyers, CPAs and academics) and has a high level of independence. This committee reviews the appropriateness of the benchmark administration and provides recommendations to the Board of Directors on remedial measures.

Furthermore, JBATA establishes a whistle-blowing system in order to detect manipulation

and misconduct related to JBA TIBOR at an earlier stage as well as the Code of Conduct which sets out, among other things, rate submission rules to be abided by reference banks and frameworks which need to be established by reference banks. JBATA discloses the Code of Conduct on its website and it has been implemented.

JBATA supervises reference banks by monitoring their compliance with the Code of Conduct as described below.

- Monitoring of submission rates
- Monitoring of the establishment of internal rules
- Monitoring of the implementation of in-house training
- Monitoring of the results of internal and external audits
- On-site monitoring of the extent of compliance with the Code of Conduct

The above control framework is stipulated in the JBA TIBOR Operational Rules, which is disclosed on its website.

➤ Principle 5 Internal Oversight

The JBA TIBOR Operational Rules provide that the Oversight Committee which is exclusively comprised of experts who do not work for or belong to financial institutions (e.g. lawyers, CPAs and academics) shall assess the appropriateness of JBA TIBOR administration framework and shall provide recommendations on remedial measures to the Board of Directors. The Oversight Committee has been implementing such rules.

More specifically, the Oversight Committee assesses the appropriateness and provides recommendations on remedial measures to the Board of Directors with respect to the following matters.

- Matters relating to the management of conflicts of interest arising from JBA TIBOR administration
- Matters relating to responses to findings, complaints and other similar actions by relevant authorities or external parties in relation to JBA TIBOR administration
- Matters relating to periodic assessments of reasonableness and appropriateness of the Code of Conduct
- Matters relating to monitoring of reference banks' compliance with the Code of Conduct and rate submissions (including monitoring of the status of establishing internal policies and procedures, the status of implementing internal training, results of internal and external audits and rate submissions)
- Matters relating to the review of establishment, amendments and termination of the rules and regulations related to JBA TIBOR (including amendments of the JBA TIBOR Operational Rules, etc.)

- Matters relating to review of an internal audit plan and the results of such audits of JBATA
- Matters relating to the punishment of reference banks

The term of the Oversight Committee members is two years (which may be extended up to four terms, in principle). They are selected by the Board of Directors.

When replacing a member, a replacement shall be selected from experts who are well-versed and well-experienced in the fields of financial economy, law and financial accounting, etc., who are capable of independently reviewing the appropriateness of conducting specified financial benchmark administration activities and if necessary, of providing recommendation to the Board of Directors, and who do not work for or belong to financial institutions.

Quality of the Benchmark

➤ Principle 6 Benchmark Design

“Underlying interest” which JBA TIBOR seeks to measure is prescribed and indicated explicitly in Article 4 of the JBA TIBOR Operational Rules. In the case of Japanese Yen TIBOR, it represents “rates which reference banks deem as prevailing market rates, assuming transactions between prime banks on the underlying market (Japan unsecured call market) as of 11:00 a.m.” and is calculated as the simple average of remaining interest rates provided by reference banks which excludes the two highest and two lowest rates.

In order to ensure appropriate rate submission based on the benchmark definition reference banks, JBATA has established, disclosed on its website and implemented the Code of Conduct which sets out, among other things, rate submission rules to be abided by reference banks, frameworks which need to be established by reference banks and other relevant matters.

As part the First Phase of JBA TIBOR reform efforts, the Code of Conduct was partially revised on February 20, 2017 (and took effect on July 24, 2017). With this revision, in particular, the waterfall methodology was introduced, standardizing and clarifying the calculation and determination process of reference banks’ submission rates, with a view to realizing a benchmark “better anchored in actual transactions”. Since July 24, 2017, reference banks are calculating and determining their submission rates using a calculation method that does not give rise to arbitrariness in accordance with the waterfall methodology (see Appendix 1 for details of the waterfall methodology).

Furthermore, in order to ensure reference banks’ compliance with the Code of Conduct, reference banks are obliged to conduct external and internal audits on an annual basis, in principle, and are required to report the audit results which are escalated to the Oversight Committee to assess their appropriateness.

Starting from April 2015, the Oversight Committee conducts monitoring to ensure that JBA TIBOR appropriately reflects “underlying interest” which it seeks to measure by, in the case of Japanese Yen TIBOR, comparing data of interbank transactions in the Japan unsecured call market collected from reference banks with each reference bank’s submission rates.

To make the benchmark design of JBA TIBOR more appropriate, JBATA has taken the following actions, including the First Phase of JBA TIBOR reform.

(1) Introduction of minimum data criteria

The Code of Conduct partially amended on July 4, 2014 (and took effect on October 6,

2014) stipulates that where Japan unsecured call transactions between prime banks are observable, reference banks must take such transactions into consideration.

(2) Clarification of criteria for use of expert judgment

For clarification, the Code of Conduct partially amended on July 4, 2014 (and took effect on October 6, 2014) sets out specific criteria for the use of expert judgment.

(3) Clarification of the procedure for overseas financial institutions to apply for a reference bank and the selection procedure.

The JBA TIBOR Operational Rules were partially revised on March 2, 2015 (and took effect on April 1, 2015), stipulating that when the applying bank is located in a jurisdiction outside Japan, any issues which may arise from its location should be considered in the selection process.

(4) Standardization and clarification of the processes for calculating and determining reference banks' submission rates through implementation of the First Phase of JBA TIBOR reform

In order to make JBA TIBOR a benchmark “better anchored in actual transactions”, the Code of Conduct was partially amended on February 20, 2017 (and took effect on July 24, 2017), standardizing and clarifying the processes for calculating and determining reference banks' submission rates.

In particular, the waterfall methodology which applies prioritization when referencing actual transaction data (i.e. places the highest priority on the underlying market data, followed by data of those relevant markets highly similar to the underlying market) was introduced, and reference banks calculate and determine their submission rates using a calculation method that does not give rise to arbitrariness since July 24, 2017.

JBATA will be committed to further enhancing the transparency, robustness and reliability of Japanese Yen TIBOR. For example, as of the assessment base date, we understand the potential need to consider partial revisions to the waterfall methodology of Japanese Yen TIBOR (e.g. revision of the use of data in the Japan Offshore Market in the 2nd Level) as a matter related to this Principle, and will update the progress of the discussion in our future self-assessment results.

➤ Principle 7 Data Sufficiency

In the Code of Conduct which was partially amended on February 20, 2017 (and took effect on July 24, 2017) for the First Phase of JBA TIBOR reform, the waterfall methodology has been introduced to standardize and clarify the calculation and determination process of reference banks' submission rates, aiming to realize benchmarks that are "better anchored in actual transactions". In accordance with this amendment, reference banks have started to calculate and determine their submission rates using a calculation method based on the waterfall methodology that does not give rise to arbitrariness since July 24, 2017.

The waterfall methodology applies a calculation method that is based on actual transaction data of the underlying market and other relevant data as shown below, and that avoids arbitrariness. Particularly in the following I to III, the use of expert judgment is completely removed.

As for JBA TIBOR, there is no case where the "expert judgement (the below IV)" was used to calculate and determine submission rates during the period between the implementation of the First Phase of JBA TIBOR reform on July 24, 2017 and the date as of the self-assessment. Submission rates have been calculated and determined based on various data including actual transaction data in the underlying market and other relevant data (see Appendix 1 for details of the waterfall methodology).

- I. The level in which data of the underlying market are used
- II. The level in which data of the markets equivalent to the underlying market are used
- III. The level in which data of the relevant market, including the wholesale market, are used
- IV. Expert judgment

For Japanese Yen TIBOR, the estimated market size (Overall) of the Japan unsecured call market (i.e. the underlying market) reached JPY 31.7 trillion⁷ (as of July 31, 2024), decreasing by approximately JPY 8.4 trillion from the prior year. Furthermore, reference banks determine their submission rates in "The level in which data of the underlying markets are used (the above I)" ranges from a minimum of 62.1% (12 months tenor) up to 100% (3

⁷ The estimated market size of "(Overall)" represents the sum of transactions via brokers and transactions through direct dealing with unaffiliated banks, whereas the size of "(Term rates)" and "(Overnight rate)" includes intragroup transactions. Therefore, the sum of the "(Term rates)" and the "(Overnight rate)" does not match the "(Overall)." Furthermore, JBATA does not calculate and publish the overnight JBA TIBOR tenor, therefore, the "(Overnight rate)" transactions are not referenced in most cases.

The "(Term rates)" also include various terms that do not necessarily correspond to the given TIBOR tenors. For details, see the *Result of a Periodic Review of the JBA TIBOR Operational Framework*: (https://www.jbatibor.or.jp/english/news/periodical_review_2025.html)

months tenor).⁸

With respect to Euroyen TIBOR, on the other hand, the amount of the transaction balance for deposits and calls denominated in Japanese yen in the Japan Offshore Market (i.e. the underlying market) continues to be smaller compared to the Japan unsecured call market. Furthermore, the percentage of submission rates determined in “The level in which data of the underlying market are used (the above I)” was lower compared to Japanese Yen TIBOR.

In consideration of such circumstance, JBATA published⁹ the Public Consultation on permanent cessation of Euroyen TIBOR and related issues ([2nd Consultative Document] Approach for Integrating Japanese Yen TIBOR and Euroyen TIBOR) based on Article 51 of the JBA TIBOR Operational Rules.

As a result, JBATA has confirmed that all the respondents supported for “to implement the permanent cessation of Euroyen TIBOR” and “to set its timing at the end of December 2024.” Therefore, JBATA has published¹⁰ the “JBATA statement on future cessation of Euroyen TIBOR” as of March 6, 2024.

Subsequently, with its final publication on 30 December 2024, the publication of all tenors of Euroyen TIBOR has permanently ceased.¹¹ Given this, JBATA considers that the remaining issue recognized for this Principle has been resolved.

⁸ “The level in which data of the underlying market are used” means the total number of cases where submission rates were determined based on data of actual transactions executed on the same day or in the past, and cases where they were determined based on quotes. In most cases, they were calculated based on quotes (Level 1-3) and in limited cases, based on actual transactions (Level 1-1). For details, see the URL provided in the preceding footnote.

⁹ https://www.jbatibor.or.jp/english/news/tibor_16.html

¹⁰ https://www.jbatibor.or.jp/english/news/tibor_18.html

¹¹ For details regarding the background of discussions on the permanent cessation of Euroyen TIBOR, see Appendix 2.

Principle 8 Hierarchy of Data Inputs

JBATA sets out the following waterfall methodology as the hierarchy of data inputs in the Code of Conduct partially revised on February 20, 2017 (and took effect on July 24, 2017), and discloses it on its website. The waterfall methodology is a mechanism where data of the underlying market placed at the top of the hierarchy are referenced first, followed by data of those relevant markets highly similar to the underlying market (see Appendix 1 for details of the waterfall methodology).

- I. The level in which data of the underlying market are used
- II. The level in which data of the markets equivalent to the underlying market are used
- III. The level in which data of the relevant market, including the wholesale market, are used
- IV. Expert judgment

➤ Principle 9 Transparency of Benchmark Determinations

The Code of Conduct partially revised on February 20, 2017 (and took effect on July 24, 2017) sets out the waterfall methodology to be used by reference banks in the process for calculating and determining their submission rates. It prescribes that the waterfall methodology is a mechanism where data of the underlying market placed at the top of the hierarchy are referenced first, followed by data of those relevant markets highly similar to the underlying market. The Code of Conduct defining the waterfall methodology is disclosed on the website (see Appendix 1 for details of the waterfall methodology).

- I. The level in which data of the underlying market are used
- II. The level in which data of the markets equivalent to the underlying market are used
- III. The level in which data of the relevant market, including the wholesale market, are used
- IV. Expert judgment

Rates provided by reference banks are the sole data sources used in JBA TIBOR determination process and published through the service provider¹². JBA TIBOR and the rates provided by reference banks, including the two highest and two lowest rates excluded from the calculation of JBA TIBOR, are available to users and related regulatory authorities.

JBATA also publishes the breakdown (in percentage) of data factored in the calculation of

¹² From April 1, 2019, JBATA terminated the simultaneous publication of rates provided by reference banks and JBA TIBOR. The rates will be published three months after JBA TIBOR of that day is published. (http://www.jbatibor.or.jp/english/news/tibor_7.html)

each reference bank's submission rates on annual basis (in March every year)¹³.

➤ Principle 10 Periodic Review

JBATA stipulates in the JBA TIBOR Operational Rules that the definition of benchmarks, the benchmark calculation and determination process to appropriately reflect the “underlying interest” which JBA TIBOR seeks to measure, and inquiries/complaints, etc. by third parties shall be assessed and reviewed on a periodic basis. The JBA TIBOR Operational Rules are disclosed on the website and JBATA is conducting such periodic assessments and reviews accordingly.

JBATA also assesses the conditions of the underlying markets, the adequacy of the percentage of transactions executed by reference banks in the markets, the conditions of other relevant markets, and then conducts a periodic review in light of changes in market conditions to assess whether it is necessary to revise the calculation methodology of JBA TIBOR (and such a periodic review has been conducted in March every year). When necessity arises in the course of ongoing discussions for maintaining and enhancing the transparency, robustness, and reliability of JBA TIBOR, public consultation will be conducted to change the calculation methodology.

The JBA TIBOR Operational Rules sets out the criteria for carrying out public consultation, the required notification period for such a review on the website (three months prior to the effective date) and the decision making process (such a review shall be decided by the Board of Directors after discussion at the Administration Committee and confirmation by the Oversight Committee), and is disclosed on the website.

To date, there has been no feedback or complaint from third parties requiring review of JBA TIBOR's calculation methodology.

Taking into account the status of using JBA TIBOR, a total of seven tenors (i.e. 4 months, 5 months, 7 months, 8 months, 9 months, 10 months and 11 months) were discontinued from the publication of April 1, 2015, and the 2 months tenor was discontinued from the publication of April 1, 2019. In addition, JBATA has permanently ceased the publication of all tenors (i.e. 1-week, 1-month, 3-month, 6-month, and 12-month) of Euroyen TIBOR at the end of December 2024.

¹³ For details of the breakdown published in FY2024, see the URL referred to in footnote 7.

Quality of the Methodology

➤ Principle 11 Content of the Methodology

“Underlying interest” which JBA TIBOR seeks to measure is prescribed and indicated explicitly in Article 4 of the JBA TIBOR Operational Rules. In the case of Japanese Yen TIBOR, it represents “rates which reference banks deem as prevailing market rates, assuming transactions between prime banks on the underlying market (Japan unsecured call market) as of 11:00 a.m.” and is calculated as the simple average of remaining interest rates provided by reference banks which excludes the two highest and two lowest rates.

JBATA provides for JBA TIBOR calculation methodology, including the definition of important terms (e.g. prime bank), in the JBA TIBOR Operational Rules and the JBA TIBOR Code of Conduct and discloses them on its website.

In particular, the Code of Conduct partially revised on February 20, 2017 (and took effect on July 24, 2017) sets out the waterfall methodology to be used by reference banks in the process for calculating and determining their submission rates. It prescribes that the waterfall methodology is a mechanism where data of the underlying market placed at the top of the hierarchy are referenced first, followed by data of those relevant markets highly similar to the underlying market. The Code of Conduct prescribing the waterfall methodology is disclosed on the website (see Appendix 1 for details of the waterfall methodology).

- I. The level in which data of the underlying market are used
- II. The level in which data of the markets equivalent to the underlying market are used
- III. The level in which data of the relevant market, including the wholesale market, are used
- IV. Expert judgment

Furthermore, in preparation for those cases where it becomes difficult for JBATA to calculate and publish JBA TIBOR against its intention because, for example, related facilities are affected by disaster, electricity power outages or other similar events take place, an extreme market stress occurs and the number of the reference banks decreases; JBATA has established the Contingency Plan for JBA TIBOR Publication and the Policy on Treatment of Revisions to JBA TIBOR Official Rates on May 31, 2017 (and took effect on July 24, 2017), clarifying actions to be taken for the inappropriate calculation of JBA TIBOR official rates and reference banks’ submission rates.

JBATA also assesses the conditions of the underlying markets, the adequacy of the percentage of transactions executed by reference banks in the markets, the conditions of other relevant markets, and then conducts a periodic review in light of changes in market

conditions to assess whether it is necessary to revise the calculation methodology of JBA TIBOR (and such a periodic review has been conducted in March every year). When necessity arises in the course of ongoing discussions for maintaining and enhancing the transparency, robustness, and reliability of JBA TIBOR, public consultation will be conducted to change the calculation methodology.

With respect to public consultation, the JBA TIBOR Operational Rules sets out, among other things, the criteria for carrying out public consultation, the required notification period for such a review on the website (three months prior to the effective date) and the decision making process (such a review shall be decided by the Board of Directors after discussion at the Administration Committee and confirmation by the Oversight Committee), and is disclosed on the website.

JBATA seeks application for, and selects reference banks every year. The criteria for selecting reference banks and reasons for cancelling the designation of the reference bank status are prescribed in the JBA TIBOR Operational Rules.

In order to enhance the quality of JBA TIBOR calculation method, JBATA takes following actions, including the First Phase of JBA TIBOR reform:

(1) Introduction of minimum data criteria

The Code of Conduct partially amended on July 4, 2014 (and took effect on October 6, 2014) stipulates that where Japan unsecured call transactions between prime banks are observable, reference banks must take such transactions into consideration.

(2) Clarification of criteria for use of expert judgment

For clarification, the Code of Conduct partially amended on July 4, 2014 (and took effect on October 6, 2014) sets out specific criteria for the use of expert judgment.

(3) Clarification of the procedure for overseas financial institutions to apply for a reference bank and the selection procedure.

The JBA TIBOR Operational Rules was partially revised on March 2, 2015 (and took effect on April 1, 2015), stipulating that when the applying bank is located in a jurisdiction outside of Japan, any issues which may arise from its location should be considered in the selection process.

(4) Standardization and clarification of the processes for calculating and determining reference banks' submission rates through implementation of the First Phase of JBA TIBOR reform

In order to make JBA TIBOR a benchmark “better anchored in actual transactions”, the Code of Conduct was partially amended on February 20, 2017 (and took effect on July 24, 2017), standardizing and clarifying the processes for calculating and determining reference banks' submission rates.

In particular, the waterfall methodology which applies prioritization when referencing actual transaction data (i.e. places the highest priority on the underlying market data, followed by data of those relevant markets highly similar to the underlying market) was introduced, and reference banks are calculating and determining their submission rates using a calculation method that does not give rise to arbitrariness since July 24, 2017.

➤ Principle 12 Changes to the Methodology

JBATA has established and disclosed on its website, the JBA TIBOR Operational Rules setting out procedures for changes in the definitions or calculation methods of benchmarks, including criteria for carrying out public consultation, the required notification period for such changes on its website (three months prior to the effective date), and the decision making process (such changes shall be decided by the Board of Directors after discussion at the Administration Committee and confirmation by the Oversight Committee).

JBATA shall consider changes in the definitions or calculation methods of benchmarks in cases where either or both of the following situations are likely to continue to exist for a certain period of time and there is no prospect of early restoration of such situation(s), which has led to a conclusion that JBA TIBOR may no longer be representative as a benchmark:

- Where there have been any structural changes in the underlying markets that may require changes in the definitions, calculation methods of benchmarks specified in Article 4 of the JBA TIBOR Operational Rules; or
- Where underlying interest which JBA TIBOR seeks to measure is no longer generally used or is not functioning, and hence is deemed to be not fulfilling its role as a reliable benchmark.

Notwithstanding the above situation(s), JBATA shall consider changes in definitions, calculation methods of benchmarks specified in Article 4 of the JBA TIBOR Operational Rules, as appropriate, where it is deemed necessary to make such changes in light of a change in users' needs and actual market conditions, JBATA determines that it is necessary to make such changes.

➤ Principle 13 Transition

JBATA has established, and disclosed on its website, the JBA TIBOR Operational Rules stipulating processes for ceasing JBA TIBOR publication.

In addition, JBATA recommends on its website updated April 1, 2014, users of JBA TIBOR to agree on a fallback provision as an alternative arrangement or measure to prepare for the situation where JBA TIBOR has not been published.

In consideration of the deliberations by “Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks”, which was established by the Bank of Japan on August 1, 2018 to consider transition to JPY risk-free rate and international discussions¹⁴ by the International Swaps and Derivatives Association (ISDA) on the robustness of contracts for fallback plans in the event that publication of IBORs are permanently ceased, JBATA established, and published on its website, the Policy on Material Changes in the Definition or Calculation Method and Continuous Suspension of the JBA TIBOR Publication¹⁵ on March 19, 2020.

In August 2022, JBATA published the Public Consultation on Fallback Issues for JBA TIBOR (“Public Consultation”) in consideration of the results of the Survey on JBA TIBOR Exposures. The Public Consultation sought comments from a wide range of market participants with respect to main fallback issues for cash products (loans and bonds) referencing Japanese Yen TIBOR or Euroyen TIBOR subject to applicable laws in Japan. These included (i) conditions on which fallback provisions are activated (triggers), (ii) options of fallback rates, and (iii) methodologies of the spread adjustment between JBA TIBOR and the fallback rate.

Subsequently, JBATA published the Results of Public Consultation on fallback issues for JBA TIBOR (“Results of Public Consultation”) in March 2023, and also revised the Policy on Material Changes in the Definition or Calculation Method and Continuous Suspension of the JBA TIBOR Publication (taking effect on April 1, 2023)¹⁶, specifying that the users of JBA TIBOR could use the results of the Public Consultation as a reference in consideration of fallback issues.

As a result of the above initiatives, JBATA evaluates that the remaining issue recognized for this Principle from a perspective of further enhancing the transparency, robustness, and reliability of JBA TIBOR has been resolved in FY2022.

¹⁴ ISDA implemented public consultation from July 12, 2018 to October 22, 2018 on technical issues related to new benchmark fallbacks for derivatives contracts that reference certain interbank offered rates (IBORs). ISDA published Preliminary Results of the consultation on November 27, 2018 and final results on December 20, 2018. (<https://www.isda.org/a/WVEME/ISDA-Publishes-Final-Results-of-Benchmark-Fallback-Con>)

¹⁵ http://www.jbatibor.or.jp/english/news/Compliance_with IOSCO_19principles_2019.html

¹⁶ https://www.jbatibor.or.jp/english/news/Results_of_Public_Consultation_on_fallback_issues_for_jba_tibor.html

➤ **Principle 14 Submitter Code of Conduct**

JBATA has established, disclosed on its website, and implemented the Code of Conduct setting out, as described below, rules to be complied with and necessary procedures to be established by reference banks in connection with their rate submission.

- Set out the waterfall methodology to standardize and clarify the process for calculating and determining reference banks' submission rates. The waterfall methodology is a mechanism where data of the underlying market placed at the top of the hierarchy are referenced first, followed by data of those relevant markets highly similar to the underlying market
- Establish a framework that ensures appropriate rate submissions, including the criteria for selecting submitters and reporting to JBATA
- Establish a framework for managing conflicts of interest, including an appropriate information barrier from personnel engaging in trading activities
- Establish a framework for prohibiting exchange/adjustments, etc. of information regarding rate submissions
- Establish a procedure for accountability regarding the rationale for rate submissions
- Establish a procedure for retaining communication records regarding rate submissions
- Conduct internal and external audits
- Establish a procedure for escalating problems, when identified, to JBATA
- Obligation for holding in-house training
- Obligation for cooperation in reviewing the administrative flow resulting from a change to the service provider, etc.
- Obligation for cooperation for inquiries from and investigation by JBATA in connection with rate submissions
- Obligation for establishing internal policies and procedures

Furthermore, JBATA supervises reference banks through monitoring of, among other things, their compliance with the Code of Conduct as follows:

- Monitoring of submission rates
- Monitoring of the establishment of internal rules
- Monitoring of the implementation of in-house training
- Monitoring of the results of internal and external audits
- On-site monitoring of the extent of compliance with the Code of Conduct

➤ **Principle 15 Internal Controls over Data Collection**

Currently, submission rates provided only by reference banks are used to calculate JBA TIBOR and JBATA does not collect data from external parties. Accordingly, this Principle is not applicable to our assessment.

JBATA checks the submission rates provided by reference banks to ensure their accuracy on a daily basis as well as the Oversight Committee monitors the appropriateness of submission rates.

Accountability

➤ Principle 16 Complaints Procedures

The JBA TIBOR Operational Rules and the Complaints Consultation Management Rule of JBATA set out management of complaints from users or other beneficiaries, in relation to JBA TIBOR determination. Also, JBATA discloses information on a liaison that responds to complaints/consultation on its website.

The liaison established within Oversight Committee Office receives inquiries and complaints regarding JBA TIBOR via phone and e-mail and periodically reports the status of receipt of such inquiries/complaints and actions taken to address them to the Oversight Committee.

The Oversight Committee monitors the status of receipt of complaints/consultation and actions taken to address them by the liaison, and assesses the appropriateness thereof.

Records of those complaints/consultation, etc. received and addressed by the liaison are retained for five years as required by the JBA TIBOR Operational Rules.

➤ Principle 17 Audits

As required by the JBA TIBOR Operational Rules to conduct internal and external audits on an annual basis, in principle, JBATA has been carrying out internal and external audits every year from the FY2014.

Results of the internal and external audit are reported to the Board of Directors and the Oversight Committee, and the overview of the results have been disclosed on the website (Between July and August every year).

Starting from FY2024, JBATA publishes an external auditor's assurance report (including a directors' report prepared by JBATA's directors) as details of the external audit results.

➤ Principle 18 Audit Trail

Pursuant to the JBA TIBOR Operational Rules, JBATA retains the following evidence required by the IOSCO Principles for five years.

- Submission rates and official rates
- If applicable, records concerning expert judgment used in determining JBA TIBOR
- Documents, etc. submitted from reference banks to JBATA in accordance with the Code of Conduct
- Records of communication with reference banks and the service provider in connection with the determination of official rates
- Records identifying the personnel of JBATA and service provider involved in JBATA

TIBOR-related operations

- External feedback, complaints and other responses to overall JBA TIBOR administration
- Records of internal and external audits
- If applicable, records of extraordinary measures which are not those procedures specified in the Operational Rules but are taken in determining JBA TIBOR official rates

Furthermore, in the Code of Conduct, JBATA requires reference banks to retain the following evidence required by the IOSCO Principles for five years.

- The content of filing to JBATA with respect to submitters
- The nature of inquiries/complaints, etc. regarding rate submissions, and records as to how such inquiries/complaints, etc. have been addressed
- Materials regarding the problem of conflicts of interest in relation to rate submissions
- Exposures to products, etc. referencing JBA TIBOR (on a basis of the entire bank, individual traders or individual desks)
- Documents relating to the determination of submission rates, and data referenced in determining submission rates, etc.
- Communication records relating to rate submissions
- Records of internal and external audits
- Records of in-house training
- Records as to how inquiries from, and investigation, by JBATA with respect to rate submissions have been addressed
- Records of revisions to internal policies and procedures

➤ Principle 19 Cooperation with Regulatory Authorities

JBATA is designated as a specified financial benchmark administrator under the Financial Instruments and Exchange Act and works closely with regulatory authorities.

The JBA TIBOR Operational Rules set forth that JBATA shall cooperate with relevant regulatory authorities by submitting and reporting records and audit results regarding JBA TIBOR calculation and other relevant information immediately upon their request.

JBATA also cooperates with the IOSCO and addresses their review of the extent of compliance with the IOSCO Principles appropriately.

○ Waterfall methodology for Japanese yen TIBOR

1st Level Data in the observable Japan unsecured call market		
1-1	Actual Japan Unsecured Call transactions	• Rates in observable actual transactions data are weighted averaged to arrive at a submission rate.
1-2	Committed Quotes of Japan Unsecured Call transactions	• Of Committed Quotes presented by brokers based on which transactions are committed to be executed, those relating to offered rates are weighted averaged to arrive at a submission rate.
1-3	Indicative Quotes of Japan Unsecured Call transactions	• A change from the previous business day in the mean rate of quotes presented by brokers is referenced. (A change from the previous day in the mean rate of quotes is added/deducted to/from the submission rate provided on the previous day to arrive at the submission rate of the day.)
1-4 (1)	Linear Interpolation	• If a submission rate of an adjacent tenor is calculated in line with the sub-tier [1-1], the linear interpolation method is applied to arrive at a submission rate.
1-4 (2)	Retroactive Use of actual transactions data	• Date back day by day up to the number of business days separately defined by JBATA, and if a submission rate is calculated in line with the sub-tier [1-1] in a business day, that submission rate is determined as a submission rate of the day.
1-4 (3)	Linear interpolation based on retroactively-used actual transactions data	• If a submission rate of an adjacent tenor is calculated in line with the sub-tier [1-1] or [1-4(2)], the linear interpolation method is applied to arrive at a submission rate.
2nd Level Data in the observable Japan Offshore Market and Interbank NCD market		
2-1	Data in the Japan Offshore Market, Data in the Interbank NCD market	• The treatment under the sub-tiers from [1-1] to [1-4(3)] are applied mutatis mutandis.
3rd Level Data in the observable NCD market (other than the Interbank NCD market), large term deposits, short-term government bonds market, GC repos market and OIS market		
	Data in the NCD market (other than the Interbank NCD market), Large Term Deposits, short-term government bonds market, GC repos market and OIS market	<ul style="list-style-type: none"> • With respect to the following data, reference a change from the previous business day. (Respective changes from the previous business day in the following data (1) to (5) are added to, or deducted from, the submission rate provided on the previous day in accordance with the method predetermined by JBATA to arrive at a submission rate of the day.) (1) Actual transactions in the NCD market (other than the Interbank NCD market) (2) Actual transactions in large term deposits (3) Quotes in the short-term government bonds market (4) Quotes in the GC repos market (5) Quotes in the OIS market
4th Level Expert Judgment		
		• A rate is provided based on expert judgment by a Person Responsible for Rate Submission and Staff Performing Rate Submission Tasks at reference banks.

Background of discussions on the permanent cessation of Euroyen TIBOR

- ✧ Having discussed the future of Euroyen TIBOR based on related agenda such as the shrink in size of the Japan Offshore Market (i.e. the underlying market of Euroyen TIBOR) for a long time, JBATA has permanently ceased the publication of the benchmark after its final publication on 30 December 2024. The table below summarizes JBATA's main actions taken up to the permanent cessation date.

Year and month	JBATA's actions	Remarks
October 2018	Published public consultation [<i>1st Consultative Document</i>] <i>Approach for Integrating Japanese Yen TIBOR and Euroyen TIBOR</i> ¹⁷	✓ Solicited comments on approach for reform and a necessary preparation period.
May 2019	Published the results of the 1st public consultation ¹⁸	✓ Stated that JBATA would contemplate future actions while deeming “permanent cessation of Euroyen TIBOR” as the most likely option of all, and that if JBATA permanently ceases Euroyen TIBOR, it envisioned a preparation period of approximately two years following the permanent cessation of LIBOR.
March 2021	Announced that the timing of permanent cessation of Euroyen TIBOR, if adopted, would be at the end of December 2024 ¹⁹	✓ The announcement was made in light of the FCA's announcement on the timing of permanent cessation of LIBOR.
August 2022	Published the <i>Public Consultation on Fallback Issues for JBA TIBOR</i> ²⁰	✓ Identified fallback issues on Euroyen TIBOR
March 2023	Published the results of the <i>Public Consultation on Fallback Issues for JBA TIBOR</i> ²¹	

¹⁷ https://www.jbatibor.or.jp/english/news/20181002_tibor_1st_consultation.html

¹⁸ <https://www.jbatibor.or.jp/english/news/consultative%20document.html>

¹⁹ https://www.jbatibor.or.jp/english/news/Compliance_with_IOSCO_19principles_2021.html

²⁰ https://www.jbatibor.or.jp/english/news/public_consultation_on_fallback_issues_for_jba_tibor.html

²¹ https://www.jbatibor.or.jp/english/news/Results_of_Public_Consultation_on_fallback_issues_for_jba_tibor.html

Background of discussions on the permanent cessation of Euroyen TIBOR

August 2023	Published the <i>Public Consultation on permanent cessation of Euroyen TIBOR and related issues ([2nd Consultative Document] Approach for Integrating Japanese Yen TIBOR and Euroyen TIBOR)</i> ²²	✓ Solicited comments from market participants with the assumption that the permanent cessation of Euroyen TIBOR would be at the end of December 2024
March 2024	Published the <i>JBATA statement on future cessation of Euroyen TIBOR</i> and the results of the 2nd public consultation ²³	✓ Taking into consideration that all respondents supported the option to implement the permanent cessation of Euroyen TIBOR at the end of December 2024, JBATA announced that the publication of all tenors (i.e. 1-week, 1-month, 3-month, 6-month, and 12-month) of Euroyen TIBOR would permanently cease immediately after the end of December 2024.
At the end of December 2024	Permanently ceased Euroyen TIBOR	—

²² https://www.jbatibor.or.jp/english/news/tibor_16.html

²³ https://www.jbatibor.or.jp/english/news/tibor_18.html