

Training Material for JBA TIBOR Code of Conduct

General Incorporated Association
JBA TIBOR Administration

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- Financial benchmarks are used as base rates for loans, for the calculation of settlement amounts for derivatives transactions, and the valuation of securities, and form the basis for financial transactions, thereby playing a significant role in global financial and capital markets.
- International discussions on measures to enhance the reliability and transparency of financial benchmarks in the wake of issues such as LIBOR manipulation are progressing. Each jurisdiction has also been considering the development of local regulation.
- In response to movements in international discussions, in Japan, “Regulation of Financial Benchmarks” was introduced in the Financial Instruments and Exchange Act (the “Act”) and JBATA was designated as a “Designated Financial Benchmark Administrator” in May 2015 and obtained approval from the Prime Minister for the operational rules in November 2015.
- After that, JBATA introduced the waterfall methodology which made JBA TIBOR be more anchored in actual transactions (JBA TIBOR Reform) as required by the FSB Report and revised the operational rules, while retaining the existing definition of JBA TIBOR and maintaining its identity. JBATA obtained approval from the Prime Minister for the revision contents in February 2017 (Revision contents will be effective from July 24, 2017).

- JBA TIBOR is now widely used as a major benchmark for short-term JPY interest rates and currently is widely used as a reference rate primarily for corporate loans in Japan as well as a fixing rate in transactions such as interest rate swaps and futures.
- After the enforcement of the amended Act, JBA TIBOR was defined as a “specified financial benchmark” and reference banks of JBA TIBOR are required to comply with the JBA TIBOR Code of Conduct.
- This training is based on Article 31 of the JBA TIBOR Operational Rules and held annually for enhancing understanding of regulatory developments for rate manipulation and financial benchmarks as well as the JBA TIBOR Code of Conduct.
- Personnel belonging to departments submitting TIBOR as well as those involved in transactions referencing TIBOR, such as loans, are required to take this training.

Circumstances Surrounding Financial Benchmark Manipulation and Global Regulations

(1) Financial Benchmark Manipulation (1/2)

- The following administrative sanctions were imposed against banks submitting TIBOR, LIBOR and EURIBOR in response to attempted benchmark manipulation with an aim to increase own profits since December 2011 and June 2012 in Japan and overseas, respectively:

| Timing | Financial Institutions | Benchmarks | Description of case | Regulator | Administrative sanctions |
|-----------|--|-----------------------------------|--|--|---|
| Dec. 2011 | <ul style="list-style-type: none"> UBS Securities UBS AG | Euroyen TIBOR | A trader repeatedly requested to change rates in favor of proprietary positions. | Japan FSA | Business suspension and improvement orders |
| Dec. 2011 | <ul style="list-style-type: none"> Citigroup Global Markets Japan Citibank | Euroyen TIBOR JPY LIBOR | Significant matters related to a report hearing order were not completely described and differed from facts. A managing executive officer asked personnel performing tasks related to rate submissions to change rates in favor of proprietary positions. | Japan FSA | Business suspension and improvement orders |
| June 2012 | Barclays | LIBOR EURIBOR | A trader attempted to influence rate submission in favor of proprietary positions or in collusion with other banks or brokers; and directed the manipulation of rate submission with an aim to maintain reputation. | UK FSA US CFTC US Dept. of Justice | Penalty £ 59.5 million \$ 200 million \$ 160 million |
| Dec. 2012 | UBS | LIBOR EURIBOR Euroyen TIBOR | A trader attempted to influence rate submission in favor of proprietary positions or in collusion with other bank(s) and /or broker(s); and directed the manipulation of rate submission that was conscious of maintaining reputation. | UK FSA US CFTC US Dept. of Justice FINMA | Penalty £ 160 million \$ 700 million \$ 500 million 59 million Swiss franc |
| Feb. 2013 | RBS | LIBOR | A trader attempted to influence a rate submitter to submit rates in consideration of derivative positions; and also influenced manipulation of rate submission in collusion with other bank(s) and/or broker(s). | UK FSA US CFTC US Dept. of Justice | Penalty £ 87.5 million \$ 325 million \$ 150 million |
| Apr. 2013 | RBS Securities | JPY-LIBOR | A trader requested to change rates in favor of proprietary positions. | Japan FSA | Business improvement orders |
| Oct. 2013 | Rabobank | LIBOR EURIBOR | A trader asked personnel performing tasks related to rate submissions to change rates in favor of proprietary positions. | Financial Authorities(U.S.,U.K., Netherlands) Japan FSA | Penalty \$ 1.07 billion Business improvement order |
| Dec. 2013 | Barclays, RBS and the other 6 banks | EURIBOR JPY LIBOR | Cartel including unfair information-sharing and collusive activities in submitting rates. | European Commission | Penalty € 1.71 billion |

(1) Financial Benchmark Manipulation (2/2)

| Timing | Financial Institutions | Benchmarks | Description of case | Regulator | Administrative sanctions |
|-------------|---|--|---|--|---|
| July 2014 | Lloyds Bank of Scotland | USD LIBOR GBP LIBOR JPY LIBOR | A trader attempted to influence rate submission in favor of proprietary positions or in collusion with other banks or brokers; and directed the manipulation of rate submission with an aim to maintain reputation. | UK FCA US CFTC US Dept. of Justice | Penalty £ 105 million \$ 105 million \$ 86 million |
| Oct. 2014 | JP Morgan Chase&Co. and the other 2 banks | CHF LIBOR | Cartel including unfair information-sharing and collusive activities. | European Commission | Penalty € 94 million |
| Apr. 2015 | Deutsche Bank | LIBOR(All currencies) EURIBOR | A trader attempted to influence rate submission in favor of proprietary positions or in collusion with other bank(s) and /or broker(s) To bid with an aim to influence on rates of other banks. | UK FCA US CFTC NY State authorities US Dept. of Justice | Penalty £ 227 million \$ 800 million \$ 600 million \$ 775 million |
| May 2016 | Citigroup Inc. | Euroyen TIBOR JPY LIBOR USD LIBOR | A trader attempted to influence rate submission in favor of proprietary positions or in collusion with other banks or brokers; and directed the manipulation of rate submission with an aim to maintain reputation. | US CFTC | Penalty \$ 175 million |
| Dec. 2016 | Crédit Agricole HSBC JP Morgan Chase&Co | EURIBOR | Cartel including unfair information-sharing and collusive activities in submitting rates. | European Commission | Penalty € 485 million |
| (Reference) | | | | | |
| Sep. 2013 | ICAP Europe | JPY LIBOR | Spread of wrong information for the purpose of illegal manipulation of the market. | US CFTC UK FCA | Penalty \$ 65 million £ 14 million |
| May 2014 | RP Martin Holdings | LIBOR | Spread of wrong information for the purpose of illegal manipulation of the market. | US CFTC UK FCA | Penalty \$ 1.2 million £ 630,000 |

(2) Development in International Discussions on Financial Benchmarks

Movements in Benchmark reforms by authorities

- In the wake of the LIBOR manipulation, authorities and benchmark administrators have embarked on reforms of major interest rate benchmarks to enhance their reliability and transparency.
- The International Organization of Securities Commissions (“IOSCO”) established a Task Force on Financial Benchmarks in September 2012 and published its final report in July 2013.

Findings by IOSCO

- i. “Incentive to manipulate Benchmark Submission” stemming from a lack of determination process, “Opportunities for manipulative conduct” created by the possibility of voluntary and/or selective Submissions .
- ii. “Restricted ability of Stakeholders to evaluate benchmarks”, arising from procedures and policies concerning the Methodology do not contain adequate detail, “Abusive conduct to influence Benchmark determinations which may be allowed” due to a lack of transparency.
- iii. “Conflicts of interests both in the determination and submission processes” resulting from submitting false or misleading data or by attempting to influence personnel responsible for determinations.

Summary of IOSCO Principles

I. Governance

- The Administrator should retain primary responsibility for the Benchmark development, determination and publication processes as well as governance.
- Documentation, implementation and enforcement of policies and procedures for the identification, disclosure, management and avoidance of conflicts of interest.
- Development of an appropriate control framework for the process of determining and distributing the Benchmark.
- Establish an oversight function to review and provide challenge on all aspects of the Benchmark determination process.

II. Quality of the Benchmark

- The design of a Benchmark should take into account generic design factors that are intended to result in a reliable representation of the economic realities of the Interest that the Benchmark seeks to measure
- The data used to construct a Benchmark should be anchored by observable transactions.
- The establishment of clear guidelines regarding the hierarchy of data inputs and the exercise of Expert Judgment used for the determination of Benchmarks.

III. Quality of the Methodology

- The publication of the Methodology used to make Benchmark determinations and the rationale for the application of such Methodology.
- The publication of procedures for making any change in the Methodology and addressing the need for possible cessation of a Benchmark.
- The development and publication of Submitter Code of Conduct and the monitoring of compliance therewith.

IV. Accountability

- The establishment and publication of a written complaints policy.
- The appointment of an independent auditor with appropriate experience and capability to periodically review and report on the Administrator’s adherence to the requirements of the Principles.
- The retention of written records used in the Benchmark determination process for five years

(3) IOSCO 19 Principles

| | | Summary of Principles |
|----------------------------|--------------|---|
| Governance | Principle 1 | The retention of primary responsibility by the Administrator, a calculation agent. |
| | Principle 2 | In case of outsourcing the Benchmark determination process to a third party, the Administrator needs to oversee the third party. |
| | Principle 3 | The documentation, implementation and enforcement of policies and procedures for the identification, disclosure, management and avoidance of conflicts of interest. |
| | Principle 4 | An appropriate control framework at the Administrator for the process of determining and distributing the Benchmark should be appropriately tailored. |
| | Principle 5 | An oversight function to review and provide challenge on all aspects of the Benchmark determination process should be established. |
| Quality of the Benchmark | Principle 6 | The design of a Benchmark should take into account generic design factors that are intended to result in a reliable representation of the economic realities of the Interest that the Benchmark seeks to measure and to eliminate factors that might result in a distortion of the price, rate, index or value of that Benchmark. |
| | Principle 7 | The data used to construct a Benchmark should be sufficient to accurately and reliably reflect the “Interest” the Benchmark measures, and be based on prices, rates, indices or values that have been formed by the competitive forces of supply and demand. |
| | Principle 8 | Clear guidelines regarding the hierarchy of data inputs and the exercise of Expert Judgment used for the determination of Benchmarks should be published or be made available. |
| | Principle 9 | The publication with each Benchmark determination, to the extent reasonable without delaying the Administrator’s publication deadline. |
| | Principle 10 | The periodic review by the Administrator of the conditions in the underlying “Interest” that the Benchmark measures. |
| Quality of the Methodology | Principle 11 | The Methodology used to make Benchmark determinations should be documented and published or made available. |
| | Principle 12 | The rationale of any proposed material change in its Methodology, and procedures for making such changes should be published or made available. |
| | Principle 13 | Clearly written policies and procedures that address the need for possible cessation of a Benchmark, due to market structure change, product definition changes, or any other condition, which makes the Benchmark no longer representative of its intended function. |
| | Principle 14 | Submitter Code of Conduct should be developed and only inputs or Submissions from entities which adhere to the Submitter Code of Conduct should be used. |
| | Principle 15 | When an Administrator collects data from any external source the Administrator should ensure that there are appropriate internal controls over its data collection and transmission processes. |
| Accountability | Principle 16 | Stakeholders may submit complaints concerning whether a specific Benchmark determination is representative of the underlying Interest it seeks to measure, application of the Methodology to a specific Benchmark determination and other Administrator decisions in relation to a Benchmark determination. |
| | Principle 17 | The appointment of an independent internal or external auditor with appropriate experience and capability to periodically review and report on the Administrator’s adherence to its stated criteria and the requirements of the Principles. |
| | Principle 18 | The retention of written records, such as all market data, submissions and any other data and information sources relied upon for Benchmark determination, by the Administrator for five years, subject to applicable national legal or regulatory requirements. |
| | Principle 19 | Relevant documents, Audit Trails and other documents addressed by these Principles shall be made readily available by the relevant parties to the relevant Regulatory Authorities in carrying out their regulatory or supervisory duties and handed over promptly upon request. |

(4) Introduction of Regulation of Financial Benchmarks (1/2)

Background & Identifying the Problem

Following LIBOR manipulation cases, problems regarding the setting process for financial benchmarks were identified and discussed internationally: a) Opportunities exist for manipulation, b) Inadequate disclosure, c) Conflicts of interest

International Developments in Introduction of Regulations

IOSCO published the “Principles for Financial Benchmarks” (“IOSCO Principles”) in July 2013 and provided principles that administrators should implement. (Note 1): IOSCO Principles address a) Governance for administrators, b) Quality of benchmarks, c) Quality of benchmark methodology, d) Administrators’ accountability

UK implemented the Law concerning a regulation of LIBOR in April 2013.

European Commission published a draft proposal for a Regulation on financial benchmarks including EURIBOR, in September 2013.

(Note 2): Benchmarks administered outside of EU permissible if regulations in administrators’ home country are assessed to be equivalent to EU regulations

Japan needs to establish government regulation for financial benchmarks used as basis for financial transactions

Framework for Government Regulation

Basic Approach

1. Amendment to the Financial Instruments and Exchange Act
2. Regulation in line with the IOSCO Principles
3. TIBOR as target for regulation for the time being
4. Administrators as primary target for regulation

Regulation of Administrators

1. Regulatory Framework

Introduce regulations on administrators of specified financial benchmarks

2. Specific Content of Regulation

To strengthen governance, designated administrators required to formulate and comply with operational rules made in line with the IOSCO Principles

3. Inspection & Supervision Framework

To ensure the effectiveness of regulation, develop inspection and supervision framework which includes the authority to require submission of reports and to conduct on-site inspections

4. Ensuring Continuity

Establish contingency plans mandated to ensure continuity of determination of specified financial benchmarks

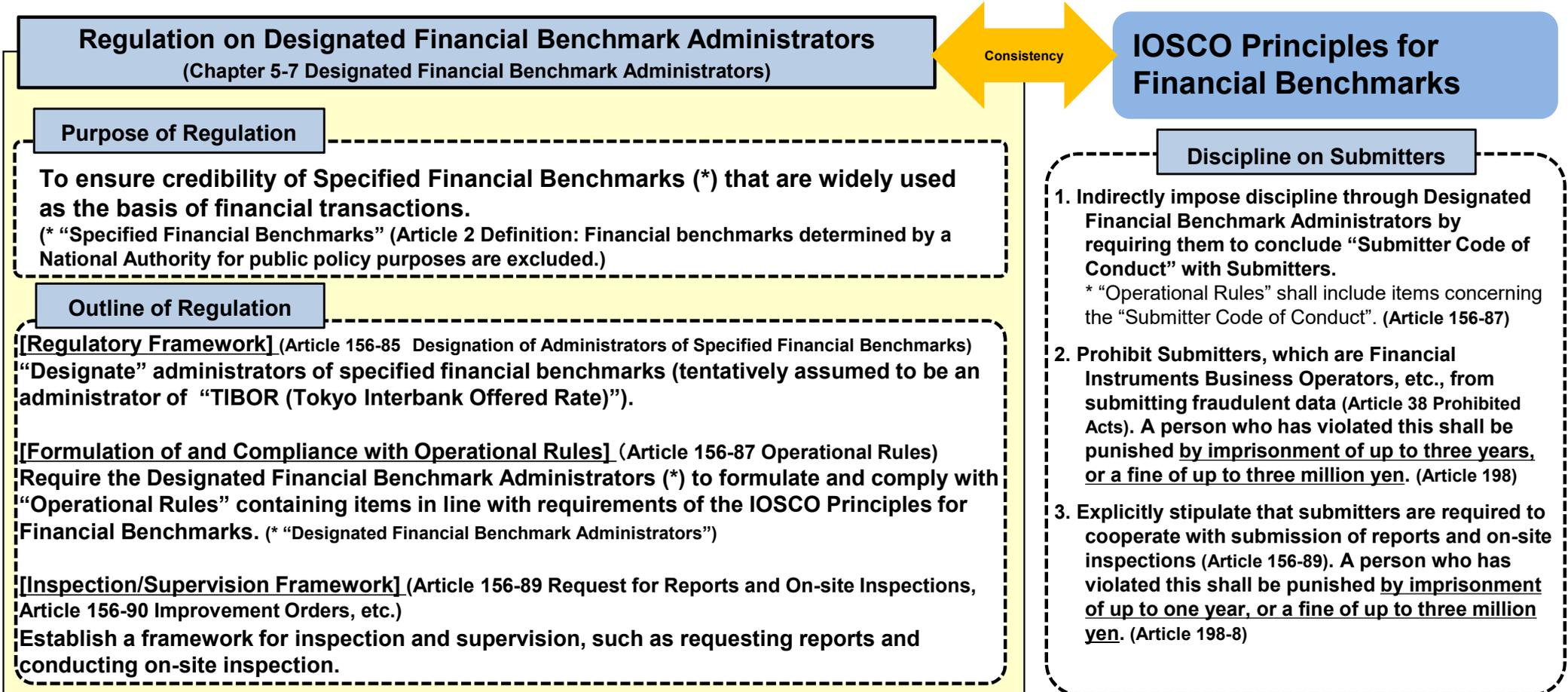
Discipline for Submitters

1. Indirectly establish discipline through administrators by concluding Code of Conduct subject to approval by authorities
2. Introduction of penal provisions against submission of false data by submitters that are Financial Instruments Business Operators, etc.

Benchmarks Administered Abroad

LIBOR and other benchmarks administered abroad exempted from Japanese regulation if they comply with the IOSCO Principles

(4) Introduction of Regulation of Financial Benchmarks (2/2)



* Created using excerpts from the Japan FSA web site.

JBA TIBOR

(1) Definition of JBA TIBOR and Calculation Methodology

Definition of Japanese Yen TIBOR(*)

- The Japanese Yen TIBOR, one of the JBA TIBOR is the respective averages of interest rates for five tenors (i.e. 1 week, 1 month, 3 months, 6 months and 12 months) ^(Note) provided by reference banks to AA as required by the Code of Conduct. In calculating the Japanese Yen TIBOR, for each tenor, JBATA excludes the two highest and two lowest rates provided by reference banks and averages the remaining rates (rounded to the fifth decimal place).
(Note) The 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. The rates, which are quoted on a 365-day basis, with a spot start, are in increments of 1/100% (1 basis point).

(*) The “underlying interests” that TIBOR seeks to represent is expressed in the above definition of TIBOR, and also in the benchmark name before abbreviation: “Tokyo Inter Bank Offered Rate”.

(2) JBA's Efforts to Enhance the Reliability of TIBOR (1/3)

Discussions on enhancement of the reliability and transparency of TIBOR

- The Review Committee on TIBOR Administration (the "Review Committee") was established. In addition, the Sub-Review Committee attended by the members of the Review Committee and all reference banks was set up under the Review Committee to discuss measures to enhance the reliability of TIBOR.
- On December 27, 2013, the findings of the review was published as the "Report on the Review of JBA TIBOR Administration" which included the measures to enhance the administrator's and reference bank's governance systems.

Enhancement of the Administrator's Governance System (Establishment of JBATA)

- In April 2014, the JBA formed the JBA TIBOR Administration (JBATA) as a new administrator and transferred its TIBOR calculation/publication operations. JBATA assumes the responsibilities for fair calculation and publication of TIBOR in line with the IOSCO Principles, a governance system which focuses on ensuring the fairness and transparency of benchmark administration has been in place.

[Governance Framework (See an illustrative diagram on page 16)]

- Directors/Board of Directors: A decision-making body. The majority of the members consist of persons other than those who are working for or belonging to financial institutions.
- Under the Board of Directors, the Oversight Committee" Administration Committee and Planning Committee are established. The Oversight Committee is an independent committee and is authorized to oversee the other Committees and recommend remedial measures to the Board of Directors.
- On an annual basis, in principle, JBATA is subject to external audit on the JBA TIBOR calculation and publication operations.

| Committee | Member Composition | Roles and responsibilities |
|------------------------------------|--|---|
| JBA TIBOR Planning Committee | Representative bank from each type of the bank | ➤ The organization, budgeting and financial closing of JBATA |
| JBA TIBOR Administration Committee | Representative bank from each type of the bank | <ul style="list-style-type: none"> ➤ The review of the definitions and calculation methodology of the JBA TIBOR ➤ The review of the selection criteria of reference banks and the selection of reference banks ➤ The development, revision and termination of the rules and regulation in relation to JBA TIBOR. |
| JBA TIBOR Oversight Committee | Experts (e.g. lawyers, CPAs, academic experts) From the perspective of maintaining independence, those who are working for or belonging to financial institutions shall not be appointed as a member. | <ul style="list-style-type: none"> ➤ The management of conflicts of interest arising from the JBA TIBOR administration, responses to findings, complaints and other similar actions by relevant authorities or external parties in relation to the JBA TIBOR administration ➤ The implementation of the monitoring of reference banks' compliance with the Code of Conduct and rate submissions (including the operating manual for such monitoring) ➤ The punishment of reference banks, etc. |

(2) JBA's Efforts to Enhance the Reliability of TIBOR (2/3)

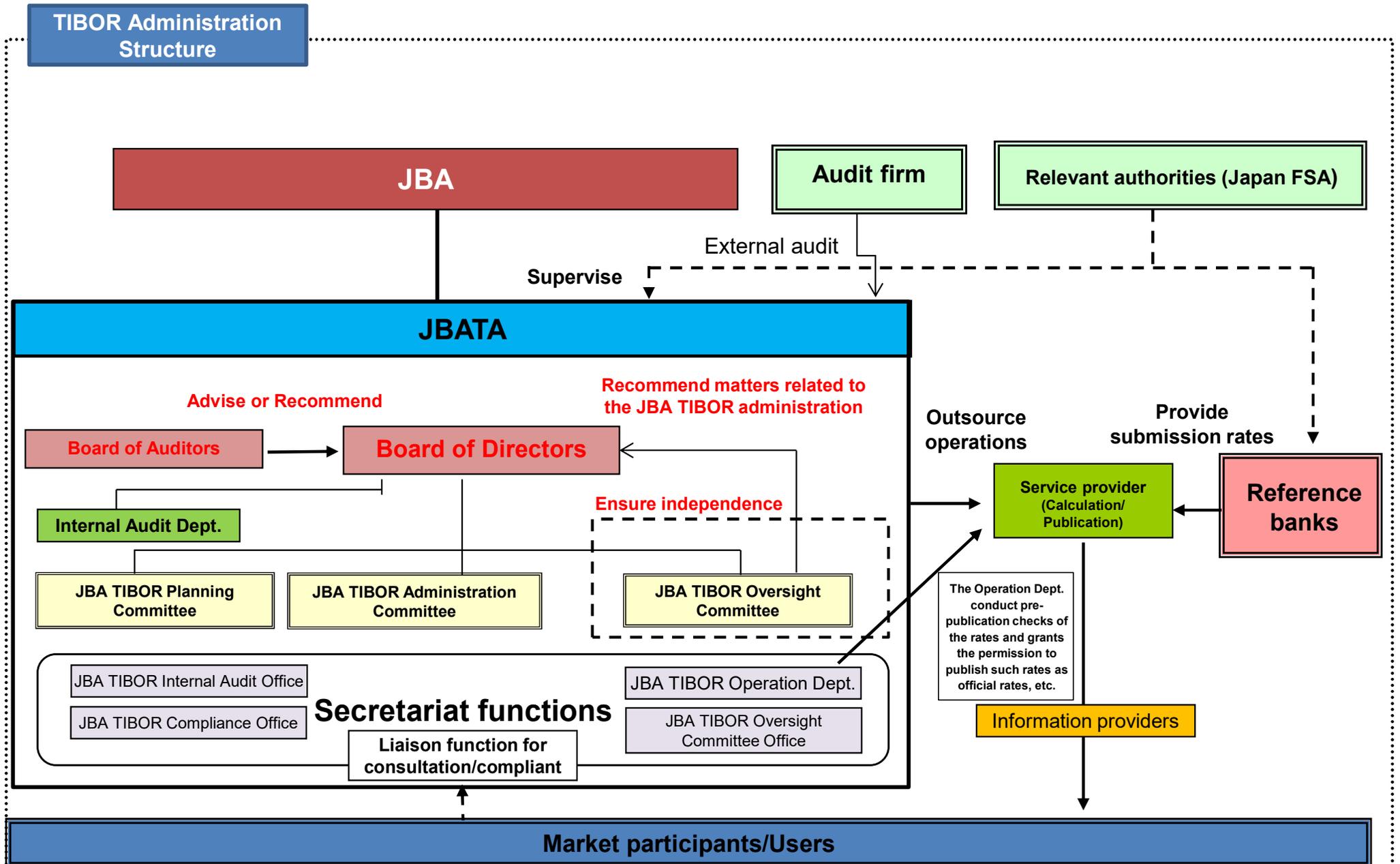
Enhancement of Reference Bank's Governance System (Formulation of the JBA TIBOR Code of Conduct)

- The "JBA TIBOR Publication Rules," which provided for TIBOR publication processes and related matters, was replaced, and the "JBA TIBOR Code of Conduct" was newly developed to set forth the rules that reference banks shall observe as well as processes that they should have in place in connection with rate submission. (For details of the matters to be followed, see after page 17).

Enhancement of Audit System (Introduction of Full-time Auditors and Establishment of the Board of Auditors)

- In order to establish a monitoring system for daily business operations (Performance of Duties by Directors, etc.), the "JBA TIBOR Audit Rules" was revised to introduce Full-time Auditors and establish the Board of Auditors.
- The Full-time Auditors audit daily business operations, share the results with external auditors, and regularly and continuously check the daily operations and accounting processes for the proper operations of the specified financial index calculation business under the Financial Instruments and Exchange Act.
- The Board of Auditors consists of all auditors, including external auditors. Upon receiving reports from each auditor, the Board of Auditors reviews the matters whether it should be advised or recommended to the Directors or the Board of Directors (See to the image on page 16).

(2) JBA's Efforts to Enhance the Reliability of TIBOR (3/3)



JBA TIBOR Code of Conduct

(Rules to be complied by reference banks)

(1) Rate Submission (1/3)

(i) Submission of rates Based on the Definition

- Provide submission rates subject to the definition for all tenors to be published.
- Determine submission rates by referring to necessary data in the order of the priority (the waterfall methodology) in the JBA TIBOR Code of Conduct.

(Reference) Outline of the waterfall methodology for Japanese Yen TIBOR (this methodology will be introduced in July 24, 2017)

| 1st Level Use data in the observable unsecured call market. | | |
|---|--|---|
| 1-1 | Actual unsecured call transactions | • Rates in observable actual transactional data are referenced. (The weighted average of the transaction value of such rates are used to arrive at a submission rate.) |
| 1-2 | Committed quotes of unsecured call transactions | • Rates relating to offered rates of committed quotes presented by brokers based on which transactions are committed to be executed are referenced. (The weighted average of those offered rates are used to arrive at a submission rate.) |
| 1-3 | Indicative quotes of 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 submitted 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 | • Go back one business day at a time up to three business days, 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 reference 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 Use 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)] is applied in this order to actual transactions, etc. to arrive at a submission rate. |
| 3rd Level Use 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, general collateral ("GC") repos market and OIS market | • With respect to the following data, reference a change from the previous business day. (Changes from the previous business day in the following data ① to ⑤ are added to or deducted from the submission rate submitted 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 submitted based on expert judgment by a Person Responsible for Rate Submission and Staff Performing Rate Submission Tasks at reference banks. |

(1) Rate Submission (2/3)

(ii) Processes and Frameworks for Appropriate Rate Submission

- Notification regarding the Department Responsible for Rate Submission, Person Responsible for Rate Submission and Staff Performing Rate Submission Tasks
 - ✓ Provide the criteria for the person(s) assuming responsibility for rate submissions (“Person Responsible for Rate Submission”) and staff member(s) performing tasks related to rate submissions (“Staff Performing Rate Submission Tasks”)
 - ✓ Identify the department responsible for rate submissions, the Person Responsible for Rate Submission and the Staff Performing Rate Submission Tasks (notify such information to JBATA).
 - ✓ In the event that the Person Responsible for Rate Submission or Staff Performing Rate Submission Tasks is temporarily unavailable, or in the event of an emergency or other similar situation, appoint another person(s) to substitute for the registered Person Responsible for Rate Submission and the registered Staff Performing Rate Submission Tasks and to undertake rate submission tasks and notify JBATA, either beforehand or as soon as the event occurs, about the substitutes, the date of substitution and other relevant information.
- Establishment of Checking Processes and controls for Submission Rates
 - ✓ Examination, validation and other means by persons other than the staff directly involved in rate submission tasks.
 - ✓ Put in place checking processes to ensure that submission rates are checked by multiple persons
 - ✓ Monitor whether there is any suspicious submission rate
 - ✓ Report immediately to JBATA if any suspicious rate is recognized.
- Registration of the information screen to JBATA which is referred to in the rate submission process.

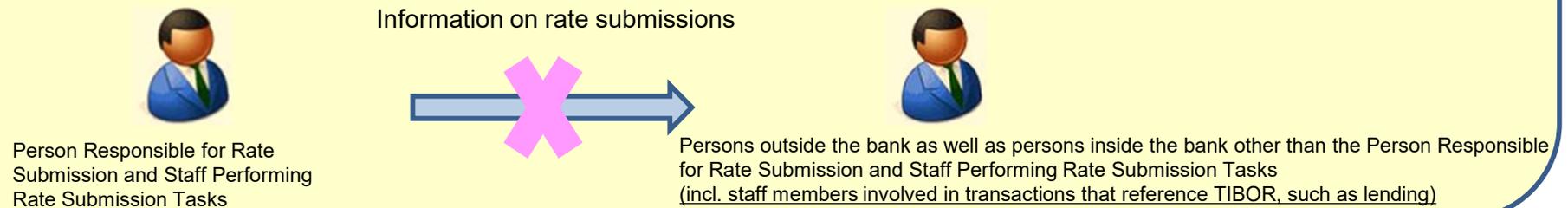
(iii) Processes and Frameworks for Management of Conflicts of Interest in relation to Rate Submission

- Define conflicts of interest in relation to rate submissions and put in place processes to appropriately manage such conflicts of interest.
- Provide examples of trading activities involving financial instruments that refer to JBA TIBOR as business procedures that are considered to have particularly high risk of manipulation of rates, as well as examples of the assumed processes to manage conflicts of interest.
- Retain information on exposures with regard to financial instruments which refer to JBA TIBOR (for five years).

(1) Rate Submission (3/3)

(iv) Prohibition of Information Sharing, Coordination and Similar Behaviors regarding Submission

- Prohibit a reference bank's Person Responsible for Rate Submission and Staff Performing Rate Submission Tasks from sharing information of the content of submissions or coordinate rate submissions with persons outside the bank as well as persons inside the bank other than the Person Responsible for Rate Submission and Staff Performing Rate Submission Tasks, unless there is a reasonable reason to do so.
- Prohibit the person responsible for and the staff performing the operation of trading activities related to financial instruments referencing JBA TIBOR at a reference bank, from reaching out to the Person Responsible for Rate Submission or Staff Performing Rate Submission Tasks, whether such persons are within the bank or belong to other reference banks, for inappropriate determination of rates; as well as from performing any other similar behavior.

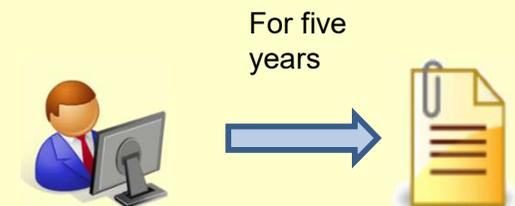


(v) Processes to Enable Post-Submission Explanations for the Grounds of Rate Submission

- Put in place processes that enable post-submission explanations about the basis for rate submissions.
- Provide examples of the documents and data to be retained.
- Disclose to JBATA and relevant authorities the information that is required to be retained, if they request to do so.

(vi) Retention of Communication Records regarding Rate Submission

- Retain communication records regarding rate submissions (e.g. e-mail, messages or chat using information vendors and phone calls)



(2) Establishment of Internal Management Framework

(i) Implementation of Internal and External Audits

- Implement internal and external audits annually in principle with regard to their compliance with the Code of Conduct.
- Report the results of internal and external audits to JBATA.

(ii) Processes for Reporting to JBATA if a Problem Occurs

- In the event of recognizing violations of the Code of Conduct or other similar incidents, report such incidents to JBATA immediately.
- Put in place internal processes to enable immediate reporting (including whistle-blowing processes).

(iii) In-house training

- Conduct in-house training in line with the Code of Conduct at least annually, targeting the Person Responsible for Rate Submission and Staff Performing Rate Submission Tasks, and report the result of the above in-house training after completion to JBATA.
- Provide the training immediately to a new Person Responsible for Rate Submission and a new Staff Performing Rate Submission Tasks.
- Provide the personnel who are involved in financial instruments transactions which refer to JBA TIBOR other than the Person Responsible for Rate Submission and Staff Performing Rate Submission Tasks with the in-house training to the extent deemed as appropriate in terms of scope and degree of their roles, at least on an annual basis.

(3) Cooperation to JBATA

(i) Notification to JBATA and Cooperation for JBATA's Inquiries/Inspections

- Cooperate and respond to requests for inquiries about daily rate submissions from JBATA or relevant authorities.
- Cooperate and respond to requests for cooperation from JBATA and audit firms concluding an outsourcing agreement with JBATA, regarding assessments and inspections on the compliance with the Code of Conduct.

(ii) Assessment of Compliance with the Code of Conduct

- Report reference banks' compliance with the Code of Conduct in selecting reference banks (on an annual basis) and whenever the Code of Conduct is amended.

(iii) Establishment of Internal Rules

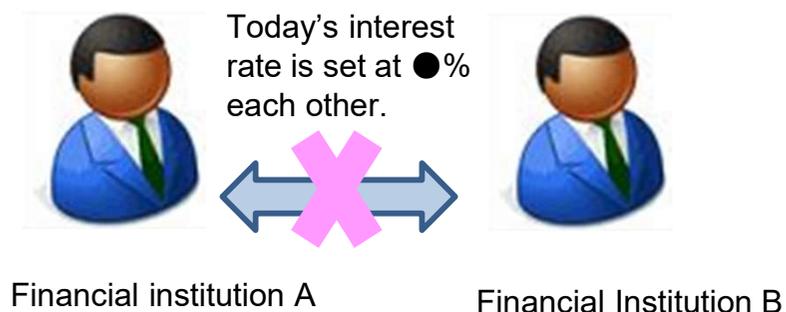
- Establish internal rules including those pertaining to the matters set out in paragraphs (1) to (13) described in section 2 of the JBA TIBOR Code of Conduct.
- Need to submit internal rules to JBATA when they are selected as a reference bank and immediately submit amended rules to JBATA whenever an amendment is made to such rules.

(4) Legal Status under the Antimonopoly Law

- Reference banks and the JBA TIBOR users, such as financial institutions, should be fully aware of the following actions that may violate the Antimonopoly Law in using the JBA TIBOR.
- Reference banks and the JBA TIBOR users should also understand that there may be cases other than those described below in which mutual communication regarding interest rates or other trading conditions among financial institutions may violate the Antimonopoly Law.

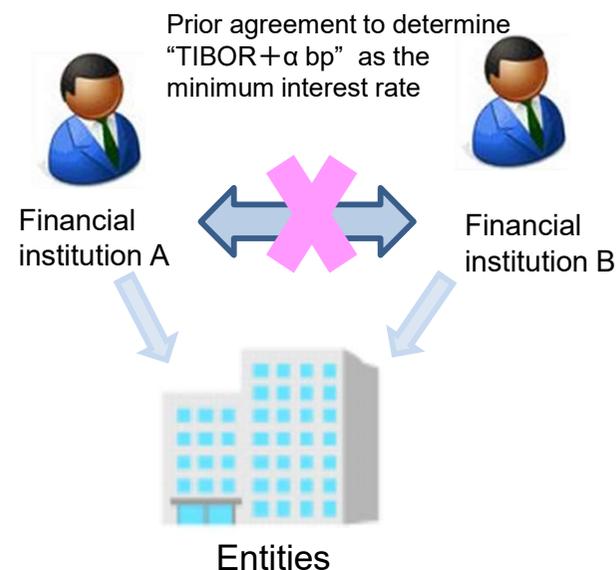
[Case 1]

- Advance exchange of information and coordination among reference banks on submitted rate levels
- In the unsecured call market, making a prior agreement among participants to trade under certain rules based on the Japanese Yen TIBOR published by JBATA and conducting such trade following such agreement.



[Case 2]

- In markets other than the Japan unsecured call market, making an agreement among financial institutions to exclusively use the Japanese Yen TIBOR (i.e. not to use other interest rate indices) as the interest rate benchmarks in financial transactions, including deposits, loans and interest swaps.
- **Making a prior agreement among financial institutions to use certain rules based on the Japanese Yen TIBOR for the determination of interest rates for spread lending, etc. and determining interest rates under such rules.**



- Note that the use of the Japanese Yen TIBOR as a trading interest rate for individual transactions does not constitute a violation of the Antimonopoly Law if individual financial institutions use the rate at their own discretion.
- A transaction in which other financial institutions participate based on their own credit decision made for the terms and conditions agreed upon between an arranger and a borrower, such as a syndicated loan, is not considered to constitute a violation act.

Other Considerations

(1) Use of Whistle-blowing System

Earlier Detection of manipulation and misconduct using a whistle-blowing system

- JBATA set up a whistle-blowing system in order to detect manipulation and misconduct related to the JBA TIBOR at an earlier stage. Personnel of JBATA, companies and their personnel to which the JBA TIBOR-related operations are outsourced, and personnel of reference banks may report and consult about such incidents.
- JBATA opens two whistleblower windows, one is called Compliance Hotline at Ippan Shadan Hojin JBA TIBOR Administration Legal & Compliance Department (In case of the matters about that department, Secretary General) and the other is at a lawyer's office,

Protection of whistleblower

- Reference banks are required to disseminate a helpline to their personnel and develop an appropriate framework for the protection of whistleblowers to prevent a whistleblower being placed in an unfavorable position even if he or she has been identified.

(2) Matters Affecting Parties to Contracts

Discontinuation of Tenors

- The IOSCO Principles set out that a Benchmark should be anchored in actual transactions. With regard to the JBA TIBOR, tenors that are supported by a low volume of transactions are discontinued in response to research on the volume and number of transactions for each tenor and seeking public comment on the discontinuation of tenors(*).

(* JBATA discontinued the seven tenors of JBA TIBOR rates for 4 months, 5 months, 7 months, 8 months, 9 months, 10 months, and 11 months on April 1, 2015. Also, the 2 months tenor was discontinued on April 1, 2019. Currently, the five tenors are available: 1 week, 1 month, 3 months, 6 months and 12 months.

“Fall-back” Provision

- The IOSCO Principles requires administrators of financial benchmarks to encourage users to arrange robust “fall-back” provisions (alternative arrangement) in contracts or financial instruments that reference a Benchmark. JBATA recommends considering a “fall-back” provision as an alternative arrangement or measure to prepare for situations where the JBA TIBOR is not published due to reasons beyond its control, etc.
- Although the parties to the contract are primarily responsible for determining whether to include “fall-back” provisions in individual contracts, possible “fall-back” provisions may include, for example, stipulating a provision that the parties to the contract shall discuss alternative reference rates where the JBA TIBOR is not published due to reasons beyond its control.
- Practically, JBATA considers whether to permanently cease to publish JBA TIBOR publication, taking into account the effects on the stability of financial economy, the scope of contracts that reference a Benchmark and the impacts thereon, as well as allowing a sufficient period to gather opinions from market participants including users.

Discontinuation of simultaneous publication of individual submission rates

- After seeking public comment about the necessity of simultaneous publication, individual submission rates are supposed to be published three months after the publication of JBA TIBOR rates

Appendix

(1) Amendments to the Financial Instruments and Exchange Act (1/2)

Discipline on Benchmark Administrators

| Items | Article No. | Description |
|--|-----------------------|---|
| “Designation” of an administrator of specified financial benchmarks | Article 156-85 | If an administrator of benchmarks is designated by the Prime Minister as the Designated Financial Benchmark Administrator, it should be subject to the amended Act. The Designated Financial Administrator should receive a written notice and be publicly announced in the official gazette. After the enforcement of the amended Act, JBATA is designated as an administrator of the JBA TIBOR. |
| Submission of documents by designated financial benchmark administrators | Article 156-86 | The Designated Financial Benchmark Administrator is required to submit, within the period set out in the Cabinet Order, the document indicating the trade name or name, the name of directors/officers, and location along with the article of incorporation and the certificate of registered matters. |
| Formulation and authorization of operational rules | Article 156-87 | <p>The amended Act requires the Designated Financial Benchmark Administrator to formulate operational rules as well as to obtain approval for such rules from the Prime Minister within the period set out in the Cabinet Order. This approval is required in the event of making any change to the rules.</p> <p>In addition to the matters stipulated in the Cabinet Office Ordinance, the rules need to contain:</p> <ul style="list-style-type: none">i Policy and methodology for the Benchmark calculation and publication;ii Matters pertaining to administration framework to appropriately conduct the Benchmark determination process;iii Matters pertaining to the code of conduct to be observed by information vendors (submitters);iv Matters pertaining to entering into a contract with information vendors (submitters);v Matters pertaining to outsourcing the Benchmark calculation operations;vi Matters pertaining to audit of the Benchmark calculation operations;vii Matters pertaining to the publication of briefing materials on the Benchmark calculation operations; andviii Matters pertaining to suspension or discontinuation of the Benchmark calculation operations. |
| Notification of cessation or discontinuation of benchmarks | Article 156-88 | In the event of cessation or discontinuation of the Benchmark being calculated, the amended Act requires the Designated Financial Benchmark Administrator to give prior notice of such cessation or discontinuation to the Prime Minister. |
| Reporting/ Inspection | Article 156-89, 194-7 | The amended Act requires the Designated Financial Benchmark Administrator and companies to which the Benchmark-related operations are outsourced to prepare relevant reports and submit relevant documents, and permits relevant authorities to conduct an inspection. Further, the amended Act stipulates that this authority may be delegated to the Securities and Exchange Surveillance Commission. |

(1) Amendments to the Financial Instruments and Exchange Act (2/2)

| Items | Reference article No. | Description |
|---|-------------------------------------|---|
| Order to improve business operation/ Recommendation of business transfer | Articles 156-90, 156-91 | The amended Act sets out that orders to improve or suspend business may be imposed on the Designated Financial Benchmark Administrator as an administrative sanction provided that public comment should be sought in imposing such order. In the event that the Designated Financial Benchmark Administrator attempts to suspend or discontinue its calculation operations, the transfer of such operations to the other party may be recommended. |
| Creation and retention of documents, and reporting | Article 188 | The amended Act stipulates that the Designated Financial Benchmark Administrator should create and retain the documents related to the operations stated in the Cabinet Office Ordinance as well as to submit reports. |
| Penalties, etc. | Articles 198-5, 198-6, 205-2-3, 206 | In the event of violating the disciplines described above, the amended Act stipulates the following penalties: imprisonment of up to two years or a fine of up to three million yen (or both); imprisonment of up to one year or a fine of up to three million yen (or both); a fine of up to three hundred thousand yen; or an administrative fine of up to three hundred thousand yen. |

Discipline on Submitters

| Items | Reference article No. | Description |
|--|-----------------------|--|
| Prohibition of unfair rate submissions | Articles 38, 66-14 | The amended Act prohibits a financial instruments business operator or a financial instruments intermediary service provider, and their officers and employees from submitting unjustifiable rates to the Designated Financial Benchmark Administrator with an aim to seek their own or third party's interests. |
| Penalties on prohibited matters | Article 198 | A person who has violated the above provision and submitted unfair rates should be punished by imprisonment of up to three years, or a fine of up to three million yen. |