This module should be read in conjunction with the Introduction and with the Glossary, which contains an explanation of abbreviations and other terms used in this Manual. If reading on-line, click on blue underlined headings to activate hyperlinks to the relevant module.

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Purpose

To set out the minimum standards on systems of control which the Hong Kong Monetary Authority (HKMA) expects AIs, which are submitting rates for the benchmark fixing process, to put in place.

To provide guidance on what and how to use relevant data in arriving at the data they submit for the fixing process.

Classification

A statutory guideline issued by the Monetary Authority (MA) under the Banking Ordinance, §7(3).

Previous guidelines superseded

CG-7 “Code of Conduct for Benchmark Submitters” (V.1) dated 03.05.13

Application

To all AIs which are submitting rates for benchmark fixings. Benchmarks in this module include HKAB’s HKD Interest Settlement Rate (more commonly known as the Hong Kong Interbank Offered Rate or HKD HIBOR), the TMA’s CNH Hong Kong Interbank Offered Rate and fixings of other types which may be specified by the HKMA in the future.

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Annex A  Code of Conduct for Reference Banks for HKAB’s Interest Settlement Rate

Annex B  Code of Conduct for Reference Banks for TMA’s CNH Hong Kong Interbank Offered Rate
1. Introduction

1.1 Functions of HKMA

1.1.1 The HKMA’s primary function under the Banking Ordinance is to promote the general stability and effective working of the Hong Kong banking system. Good and ethical banking practices are essential for safeguarding depositors’ interests, maintaining the stability of the banking system and preserving Hong Kong’s reputation as an international financial centre.

1.1.2 Under §7 of the Banking Ordinance, the MA has the functions, inter alia, to:

- take reasonable steps to ensure that AIs operate in a responsible, honest and business-like manner;
- promote and encourage proper standards of conduct and sound and prudent business practices among AIs; and
- suppress, and aid in suppressing, illegal, dishonourable and improper practices in relation to the business conducted by AIs.

1.1.3 As financial market benchmarks are relied upon in the valuation and settlement of financial contracts and manipulation of major financial market benchmarks could have important implications for the economy at large, the HKMA believes that it is consistent with these functions to require AIs involved in benchmark setting activities to ensure proper oversight over such activities and put in place effective systems of control.

1.2 Responsibility of managers

1.2.1 In the Fourteenth Schedule of the Banking Ordinance, the business or affairs specified for the purposes of the
definition of a manager\(^1\) are, amongst others:

- the carrying on of retail banking, private banking, corporate banking, international banking, institutional banking, treasury or any other business which is material to the AI;

- the maintenance of systems of control of an AI, including those systems intended to manage the risks of the AI; and

- the function of ensuring that an AI complies with laws, regulations or guidelines that are applicable to it (i.e. the compliance function).

1.2.2 As the benchmark is referenced in interbank market transactions, and used in the valuation and settlement of financial contracts of bank’s treasury business, the HKMA believes AIs have the duty to ensure the integrity and robustness of the benchmark setting process. The HKMA therefore holds the managers for treasury business, risk management, and compliance accountable to the robustness of their AI’s benchmark submissions. Among them, the manager of treasury business shall assume primary responsibility for ensuring the integrity and credibility of the benchmark submission process.

1.3 Implications of non-compliance

1.3.1 The minimum authorization criterion under para. 10 of

\(^1\) Under §2 of the Banking Ordinance, a “manager” of a locally incorporated AI means any individual (other than a director or chief executive, including an alternate chief executive) appointed by the AI, or by a person acting for or on behalf of or by arrangement with the AI, to be principally responsible, either alone or with others, for the conduct of any one or more of its affairs or business specified in the Fourteenth Schedule to the Ordinance.

For an overseas incorporated AI, a “manager” means any individual (other than the chief executive, including an alternate chief executive) appointed by the AI, or by a person acting for or on behalf of or by arrangement with the AI, to be principally responsible, either alone or with others, for the conduct of any one or more of its affairs or business in Hong Kong specified in the Fourteenth Schedule to the Ordinance.

The MA may declare in a notice under §2(14)(cb) that an individual, or a class of individuals, is not a manager, or a class of managers, for the purposes of the definition.
the Seventh Schedule to the Banking Ordinance provides that an AI should have adequate accounting systems and adequate systems of control. Moreover, under para. 12 of the Seventh Schedule, the MA should be satisfied that the business of an AI is carried out with integrity, prudence and the appropriate degree of professional competence and in a manner which is not detrimental to the interests of depositors or potential depositors.

1.3.2 Failure to adhere to the standards and requirements in this module may call into question whether an AI continues to satisfy the above-mentioned criteria. Such failure may also cast doubt on the fitness and propriety of individual directors or the chief executive of the AI.

1.4 Interpretation

1.4.1 The recommendations set out in this Code are supplementary to and do not supplant any relevant legislation, codes, guidelines or rules applicable to benchmark submitting AIs.

2. Basic principles in Code

2.1 Organisational and governance arrangements

2.1.1 AIs must establish and maintain adequate and effective organisational and governance arrangements for the process of making benchmark submissions in line with the Code.

2.1.2 These arrangements should include:

- designating the senior executives for the treasury, risk control and compliance functions to oversee, and be accountable for, all matters relating to the benchmark submission process. Among them, the senior executive for the treasury function shall assume primary responsibility for ensuring the integrity and credibility of the benchmark submission
process;

- ensuring that the designation of staff involved in the determination and approval of benchmark submissions are of appropriate rankings, and possess adequate skills, knowledge and expertise for responsibilities assigned;

- development and consistent application of an effective methodology for deriving benchmark submissions which complies with guidance on rate corroboration process set out in this Code; and

- compliance with the First Conduct Rule as set out in §6 of the Competition Ordinance which prohibits agreement, concerted practice and decisions that distort competitions.

### 2.2 Conflicts of interest

2.2.1 AIs must maintain and operate effective organisational and administrative arrangements to enable it to identify and manage any conflicts of interest that may arise from the process of making benchmark submissions.

2.2.2 These arrangements should include:

- establishing a set of ethical values for observance by all staff in relation to the benchmark setting process;

- establishing, implementing and maintaining a conflicts of interest policy which:
  - identifies the circumstances that constitute or may give rise to a conflict of interest arising from its benchmark submissions or the process of gathering information in order to make benchmark submissions; and
  
  - sets out the approach to managing such conflicts;
establishing effective controls to manage conflicts of interest between the parts of the business responsible for the benchmark submission and those parts of the business who may use or have an interest in the benchmark rate; and

establishing effective measures to prevent or limit any person from exercising inappropriate influence over the benchmark submission.

2.3 Retention of records

2.3.1 AIs should retain records relevant to the benchmark submission process for a reasonable period of time.

2.3.2 AIs should ensure the records are retained in a medium that allows the storage of information in a way accessible for future reference, and in such a form and manner that it must not be possible for the records to be manipulated or altered.

2.3.3 AIs should readily make available all relevant records to the HKMA in a timely manner upon request.

2.4 Independent reviews

2.4.1 AIs should establish, implement and maintain policies for the regular independent checking of rate submissions and relevant procedures.

2.4.2 Such policies should include the regular submission of reports to senior management by the compliance function or by independent reviewer(s) in relation to its findings and conclusions on AIs’ submissions and the submission processes.

2.5 Handling complaints and whistleblower reports

2.5.1 AIs should establish, implement and enforce polices and procedures for handling complaints arising from the rate submission process, as well as any whistleblower reports received.
2.5.2 AIs should inform the administrator and the HKMA without delay if they suspect that any person:

- is manipulating or has manipulated a benchmark;
- is attempting to or has attempted to manipulate a benchmark; or
- is colluding in or has colluded in the manipulation or attempted manipulation of a benchmark.

2.6 Timely submissions

2.6.1 AIs should implement and maintain systems that are adequate to ensure the consistent and timely delivery of submissions.
Annex A: Code of Conduct for Reference Banks for HKAB’s Interest Settlement Rate

Structure

PART I – INTRODUCTION
A2. Objectives
A3. Communication to staff

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PART III – RECOMMENDATIONS FOR BENCHMARK SUBMITTERS
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PART I – INTRODUCTION

A1 Status of the Code of Conduct

A1.1 This Code of Conduct (Code) is developed by the Treasury Markets Association (TMA), the Hong Kong Association of Banks (HKAB) has been consulted in the process. The Code is endorsed by the Hong Kong Monetary Authority (HKMA) and is issued under §7 of the Banking Ordinance as a statutory guideline.

A1.2 HKMA expects AIs which are benchmark submitters to comply with the Code. All benchmark submitters shall confirm with the benchmark administrator adherence to this Code annually (including any changes to this Code that benchmark submitters are expected to achieve full compliance during the year). HKMA will monitor compliance as part of its regular supervision.

A1.3 In order to cope with changes in market conditions, the Code should be regularly reviewed such that enhancements can be introduced where appropriate and necessary. It is envisaged that the Code will continue to evolve to take into account new market developments, as well as new international standards on industry best practices to be observed in the setting of financial benchmarks.

A1.4 This is the first edition of the Code and is effective from 3rd May 2013. Institutions should take active steps to comply with the provisions as quickly as possible. They should achieve full compliance within 6 months of the effective date.

A2 Objectives

A2.1 The Code is intended –

(a) to set out reference banks’ obligation to
contribute and to ensure integrity of rate fixing process for HKAB’s Interest Settlement Rate (more commonly known as the Hong Kong Interbank Offered Rate or HIBOR);

(b) to provide guidance to reference banks in the rate contribution process;

(c) to promote discipline amongst reference banks in submitting reference rates;

(d) to strengthen internal control amongst reference banks in submitting reference rates;

(e) to increase the transparency of the benchmark fixing process; and

(f) through the above, to foster confidence in the HIBOR fixing framework.

A3 Communication to staff

A3.1 Reference banks should ensure that all staff involved in the benchmark fixing process are given a copy of this Code and are asked to study it before they start performing their duties. This code should also be made readily available to all staff, for instance, uploaded on the intranet, to ensure that they have easy and ready access to it when they want.

PART II – GUIDANCE ON RATE CORROBORATION PROCESS (GRCP)

A4 Procedures for rate corroboration process

A4.1 Reference banks should develop comprehensive and clear written procedures to guide the rate corroboration process for the purpose of HIBOR submission. The procedures should adhere to the following guiding principles.
A5 Guiding principles for rate corroboration process

A5.1 HIBOR submissions should be explicitly and transparently supported by transaction data.

A5.1.1 According to the definition of HIBOR, reference banks are asked to provide their “estimated offer rates at which deposits in HKD are quoted to prime banks in the Hong Kong interbank market at 11:00 a.m.” To provide sufficient credibility to the HIBOR fixing mechanism, such estimation should be explicitly and transparently supported by transaction data. Such transactions should be conducted at an arm’s length to ensure their bona fide nature.

A5.1.2 Reference banks should devote sufficient resources to collect relevant transaction data in an effective, organised, and timely manner. Subject to confidentiality consideration, such transaction data should be made available to the submitter in a timely manner for rate corroboration purpose.

A5.2 Reference banks should develop a clear hierarchy of transaction data relevant to the HKD interest rates.

A5.2.1 To achieve adequate transparency and consistency in the use of transaction data, reference banks should construct a clear hierarchical structure of HKD interest rates in the order of their relevance to the definition of HIBOR.Submitter should under normal circumstances follow the hierarchy in determining rates to be submitted.
A5.2.2 While the hierarchy of HKD interest rates might change over time due to changes in the relative market liquidity of different HKD interest rate instruments, a typical hierarchy under the prevailing market condition is as follows:

(a) Directly relevant transactions

- Where the reference bank is a prime bank, both its borrowing from any bank and its lending to other prime banks are considered directly relevant.

- Where the reference bank is a non-prime bank, its lending to other prime banks is considered directly relevant. Nevertheless, its borrowing from other banks, be they prime or not, can only be regarded as indirectly relevant.

(b) Indirectly relevant transactions

- HKD swap offer rate as implied from USD/HKD FX swap.

- HIBOR rates as suggested by derivative instruments including HKD forward rate agreements (HKAB FRA) and HIBOR futures.

- HKD interest rates of unsecured short term instruments issued by prime banks, e.g. negotiable certificates of deposit (NCD).

- Non-HIBOR HKD interest rates: e.g. HKD repo rates, HKD government rates, other credit risk free rates.
such as the overnight index swap (OIS), and unsecured lending rate to a non-prime bank

(c) Quotes by money brokers offered to prime banks, with higher priority given to firm quotes (i.e. quotes with dealing prices)

A5.3 Submitters should exercise expert judgement in an objective and consistent fashion.

A5.3.1 To ensure submissions made are representative of the HIBOR definition, reference banks should, in adhering to the established hierarchy of transaction data, exercise judgement to (i) assess the quality of transaction data and (ii) determine whether and how adjustments should be made to transaction data.

A5.3.2 In exercising expert judgment, submitters should consider, among other factors, the following factors:

(a) Reliability of transaction data – Transactions entered into by the reference banks themselves are considered the most reliable. Reference banks therefore should endeavour to put in place arrangement to compile such data in a format that can be revealed to the submitters. In cases of Chinese-Walls controls prohibiting exchange of trading information between different dealing desks, consideration should be given to providing sanitized data such that no sensitive information will be revealed. Reference banks may be able to obtain market transaction data through market
intelligence. Their reliability varies, depending on the source of information; and they are considered less reliable as compared to the reference banks’ own transactions.

(b) Trading time of supporting transactions and market volatility – The smaller the time gap between the time of transactions and the time of submission is, the more relevant the transactions are. In a more volatile market a smaller time gap would be required, while in a stable market a longer time gap can be tolerated. There could be circumstances when a market shock emerged but quickly dissipated. Transactions occurred during that short period of shock, even if it is close to the submission time, may be considered less relevant.

(c) Reasonableness of transaction size – The size of the supporting transactions should be of reasonable sizes in order to be relevant. There is no hard and fast rule as to what is reasonable and judgement is therefore needed. To facilitate consistent exercising of judgement along the size dimension, reference banks should regularly compile statistics to support their judgement. If for example statistical data suggest that a ticket size of HK$ 50 million is not uncommon, reference banks should accept transactions of this size as relevant unless there are strong justifications suggesting otherwise.

(d) Basis differences between different HKD interest rate markets – In
referencing indirectly relevant transaction data, appropriate adjustments should be made to ensure the submission is representative of the HIBOR definition. Reference banks should develop techniques regarding the adjustments that need to be applied under different market scenarios. These techniques should be documented and approved by the senior management overseeing the HIBOR fixing process (e.g. Treasurer) as well as independent reviewers (e.g. risk manager or external professional firms). The effectiveness of these techniques should be assessed regularly with a view to making necessary refinements. Amongst other things, adjustments are normally made for one or more of the components of HIBOR as set out in para. A5.4 below.

A5.4 Reference banks should develop a structured and documented approach towards HIBOR submission.

A5.4.1 Reference banks should develop a structured approach to analyse the composition of HIBOR. Such structural analysis should be comprehensively documented and approved by the senior management overseeing the HIBOR fixing process as well as the independent reviewers.

A5.4.2 In referencing indirectly relevant transactions, submitters should exercise judgment according to the framework outlined by the approved structural analysis. If special market circumstances arise, rendering it justifiable for the submitters to make necessary adjustments for factors
not covered in the analytical framework, the submitters should document the justifications for review by the senior management overseeing the HIBOR fixing process as well as the independent reviewers.

A5.4.3 In developing a structural analytical framework for consideration of making adjustments in referencing indirectly relevant transactions, reference banks may adopt a modular approach which regards HIBOR as comprising the following components, amongst others:

(a) **Interest rate** – This refers to credit-risk-free rate. Typical sources of reference include the rates on OIS or yields of local currency denominated paper issued by the government. It is noted that the latter can also be affected by other factors such as market liquidity.

(b) **Credit risk premium for prime banks** – This component is not easily observable because it mingle with other components, including market liquidity risk premium and funding liquidity risk premium as set out in paras A5.4.3(c) and A5.4.3(d) below. In assessing whether adjustment should be made for this component, reference banks may take into account relevant price information such as credit default swap (CDS) spreads of prime banks and market yields of senior unsecured debt they issued.

(c) **Market liquidity risk premium** – If there are relevant market information indicating that market liquidity for the
unsecured wholesale funding market has materially improved (or deteriorated), reference banks should exercise judgment to adjust their submissions downward (or upward) to reflect the changes in market liquidity risk premium.

(d) **Funding liquidity risk premium** – For liquidity risk management purpose, banks are willing to pay a higher price to secure more stable and longer term funding, and they will similarly charge a higher price for providing funding liquidity in the form of unsecured interbank lending.

A5.4.4 With the support of a structural framework, reference banks should demonstrate consistent application of expert judgment. Specifically, indirectly relevant transactions should be used only when direct ones are lacking. Moreover, the methods used for making adjustments on directly relevant transactions should be consistently applied. In circumstances that warrant changes to such methods, documented justifications should be maintained for audit trail purpose.

A5.5 **Techniques to be used for making estimation should be approved by independent reviewers, such as the risk manager.**

A5.5.1 When making adjustments based on indirectly relevant transaction data, banks may adopt various techniques. Proprietary techniques are acceptable provided that they are supported by diligent analysis and satisfactory back-testing results.

A5.5.2 Standardised techniques such as
interpolation or extrapolation can be used as a last resort if reference banks lack data to support a submission. Another commonly used technique is by inference. For instance, if a reference bank judges that its credit standing relative to prime banks has remained stable, it may observe the changes of its own funding cost and use them to infer the funding cost of prime banks.

A5.6 Reference banks should establish criteria for identifying prime banks.

A5.6.1 Prime banks are usually characterised by good credit rating, a broad funding base, good reputation, and a strong balance sheet.

A5.6.2 Reference banks should establish criteria, taking into account the characteristics mentioned in para. A5.6.1 above, for identifying prime banks. For operational efficiency, reference banks should maintain an internal list of counterparties which they regard as prime banks. The list should be subject to independent reviews, e.g. by the risk manager responsible for bank credit. While submitters may propose that certain banks be taken out from or be included in the list of prime banks, justifications should be provided for approval by the independent reviewer.

A5.7 Reference banks should develop effective procedures for rate corroboration with clear audit trail.

A5.7.1 Rate corroboration is a high frequency and time critical task. It has to be conducted every working day at a pre-specified time.
It is therefore desirable to automate the rate corroboration process as far as possible, which forms a basis for the submitters to exercise expert judgement. It is important for the process to be clearly documented for subsequent reviews by independent parties.

A5.7.2 Reference banks should develop their rate corroboration process based on their own operational environment and management information system. Below illustrates one form of design:

(a) A HKD transaction data report should be compiled daily. The report should be able to show all transactions categorised in accordance with the hierarchy of HKD transactions as approved by the reference banks.

(b) The report should also contain qualitative data, including those covered in paras A5.3.2 (a) – A5.3.2 (c) above, which will enable the submitters to decide whether the data should be relied on.

(c) Based on approved techniques, the report may be automated to provide a preliminary estimation of HIBOR based on different data sources. Techniques are available to infer HIBOR from different instruments mentioned in para. A5.2.2.

(d) The step described under para. A5.7.2(c) should provide a range of estimated HIBOR for reference by the submitters. Based on these estimates and taking into account the quality of
the corresponding data support, submitters would be in a position to exercise judgement on the final rate to be submitted.

(e) In a stable market environment, the reasoning behind the submitters' judgement would not vary significantly from one day to the next. The reporting burden of the submitter should be minimal in this scenario. However, when market conditions change so significantly that the reasoning behind expert judgement has to be modified, the submitters will need to explain in greater detail the modified reason supporting the judgement.

(f) The daily reports and the submitters' documentation on their judgements (including those under special circumstances as mentioned in para. A5.7.2(e) above) should be properly retained for audit trail purpose.

PART III – RECOMMENDATIONS FOR BENCHMARK SUBMITTERS

A6 Organisational and governance arrangements

A6.1 Senior management oversight

A6.1.1 Als should designate the senior executives\(^2\) for the treasury, risk control and compliance functions to oversee, and be accountable for, all matters relating to the benchmark submission process. Among them, the senior executive for the

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\(^2\) These senior executives should be the respective Managers as defined in the Fourteenth Schedule of the Banking Ordinance.
treasury function shall assume primary responsibility for ensuring the integrity and credibility of the benchmark submission process.

A6.1.2 The senior executives should ensure that the AI develops, implements and enforces policies and procedures for the following:

(a) Collection and compilation of benchmark submissions, and ensuring compliance with the GRCP of this Code;

(b) Internal authorization to conduct rate submission, submitter-approver control (see para. A6.3) and adherence to the four-eye principle in the rate submission process;

(c) Ethical standard (see para. A7.1), segregation of duties (see para. A7.2) and physical separation (see para. A7.4.2) to address possible conflicts of interest that may arise from the AI’s role as both the contributor and user of the reference rate;

(d) Effective systems of control, including but not limited to proper retention of records and periodic independent reviews of the rate submission processes;

(e) Handling complaints and whistleblower reporting mechanism; and

(f) Adequate systems of control to ensure the consistent and timely delivery of submissions.

A6.2 Benchmark submission
## A6.2.1 Submitters

Submitters should try their best to collect and review transaction data that are relevant to the rate submission process before every rate submission.

## A6.2.2 Submitters

Submitters should make reference to the hierarchy of transactions set out in the GRCP to support their benchmark submissions.

## A6.2.3 Submitters

Where judgment is applied on the directly relevant or indirectly relevant transaction, submitters should ensure that such judgment is applied in a consistent and professional manner, and in compliance with their AIs’ approved techniques for making adjustment and the GRCP.

## A6.2.4 Submitters

Submitters should record the factors, adjustment and considerations that were used to determine the submissions. In particular, they should identify any relevant transactions that were excluded from the determination of the submission(s) and the basis for such exclusions, as well as identifying all transactions given the greatest weight or considered to be the most relevant, and the basis for such conclusion.

### A6.3 Submitter-approver arrangement

A6.3.1 Als should put in place a submitter-approver process and assign the right personnel for these roles to ensure the process is conducted in an independent and professional manner.

A6.3.2 Submitters should possess sufficient experience in the relevant markets. Approvers should possess sufficient
expertise and seniority so as to challenge the rates proposed by the submitter.

A6.3.3 Als should ensure there are back-up arrangements for periods of absence by the submitter and the approver. The back-up staff should also possess experience in the relevant markets and should preferably be someone who works routinely with the approver and/or the submitter.

A6.3.4 The role and responsibility of the designated submitter and approver, including their alternates, should be well defined and properly documented in the bank’s policies and procedures; their authorization should be clearly set out in writing.

A6.3.5 Submitters and approvers should be given sufficient training and guidance on the rate determination process, as well as this Code, and other ethical standards that they are expected to meet in their roles.

A6.3.6 The approver should review all relevant information, as well as the judgement made by the submitter, before approving and signing-off the proposed rates for submitters’ submission.

A7 Conflicts of interest

A7.1 Ethical standards for staff

A7.1.1 Als should develop a set of ethical standards specifically addressing the benchmark fixing process. Among other things, the following should be observed:

(a) Staff should act with integrity in carrying
out his/her duties in relation to the benchmark fixing process. In the case of benchmark submitters and approvers, acting in integrity means the determination of rates should be based on the sole objective of reflecting the definition of benchmark.

(b) Staff who have access to or are in control of the benchmark submission process should provide adequate safeguards to prevent its abuse or misuse. They should not use any such information made available to them in the course of their duties in return for monetary rewards or personal interest or to disclose such information other than for the purpose of benchmark fixings.

(c) It is acknowledged that the submitters are usually dealers of the money market desk. Staff should endeavour to minimise the conflicts of interest problem through ensuring their independence in the rate submission process.

(d) Staff should immediately report to at least one of the senior executives responsible for the benchmark submission process or their designates if they suspect that any person

(i) is manipulating or has manipulated a benchmark;

(ii) is attempting to or has attempted to manipulate a benchmark; or

(iii) is colluding in or has colluded in the
manipulation or attempted manipulation of a benchmark.

(e) Staff responsible for contributing or approval of benchmark should not deal in financial instruments that are valued or settled with reference to the benchmark unless approval is granted by their supervisors. A copy of the application and approval should be retained by the compliance office.

A7.1.2 AIs should communicate clearly to their staff the ethical standards expected from them and require them to sign off the relevant code.

A7.1.3 AIs should develop training programmes (e.g. forming part of the induction course for new recruits and of refresher courses for existing staff) and remind staff of the requirements of the Code at periodic intervals (e.g. through issuance of circulars) to ensure staff familiarise themselves with these standards.

A7.2 Segregation of duties

A7.2.1 To address the possible conflicts of interest issue arising from the reference bank’s role as both the contributor and user of the reference rates, reference banks should put in place appropriate controls, including but not limited to:

(a) Clear segregation of duties between staff involved in the rate corroboration process and staff involved in proprietary trading of interest rate derivatives. Under no circumstances should the AIs’ interest rate derivatives traders act as...
the AIs’ benchmark submitter.

(b) Submitters, supervisor and any parties designated to make submissions when the submitters are absent shall not be assigned any roles in derivatives trading desk, unit or division within the AI.

A7.3 Remuneration policy

A7.3.1 AIs should be mindful of the possible incentives for benchmark manipulation in formulating its remuneration policies and take active steps to reduce such incentives.

A7.4 Submitter’s communication

A7.4.1 Submitters are required to conduct all business related to the AI’s submissions on the AI’s recorded telephone and electronic communications systems, and not on personal telephones or other electronic devices.

A7.4.2 AIs should bear in mind the conflicts of interest issue in drawing up the sitting arrangements for the submitters and the traders who primarily deal in derivatives products that reference the benchmark. More specifically, the two groups should not be located next to or be in close proximity to one another so as to discourage improper communications.

A7.4.3 Submitters and approvers should not involve themselves in communications, whether internal or external to the bank, that attempt to influence AIs’ submissions for the benefit of any derivatives trading position (whether of the AI’s or any third
party) or to cause the submitter or approver to violate any applicable rules or definitions for benchmark.

A8 Retention of records

A8.1 AIs should retain records relevant to the benchmark submission process for a reasonable period of time. In particular, they should keep for at least seven years, the following:

(a) records of benchmark rates submitted, including information used in the benchmark determination process and adjustments made together with their justifications;

(b) records of the submitter-approver process;

(c) records of communications with administrator or calculation agent in relation to rates submitted;

(d) records of compliance checking conducted;

(e) reports to senior management in relation to reviews conducted on the benchmark submission process; and

(f) records of submission queries and complaints, and their respective outcomes.

A8.2 AIs should keep for at least two years records of audio communications between the benchmark submitting staff and other third parties.

A8.3 AIs should make readily available all relevant records to the HKMA in a timely manner upon request.

A9 Independent reviews

A9.1 AIs should develop commensurate independent review processes. Such process should include (a)
quarterly regular review, (b) unscheduled compliance check, and (c) annual audit review except for the year where the submission process is subject to an external audit. An external audit review should also be conducted every 2-3 years.

A9.2 While the scope of the review may vary between AIs, at a minimum, the quarterly review should cover:

(a) Assessing the reasonableness of rates contributed, by conducting back-testing analysis, including but not limited to:

   (i) Comparison with AIs’ own transaction data; and

   (ii) Comparison with other panel banks’ data (e.g. frequency of results trimmed, deviation of submissions from fixing results).

A9.3 For the other reviews, the scope should include:

(a) Ascertaining the proper maintenance of records of the rates corroboration and submission process, including data used and justifications for any departure from the normal rate corroboration process;

(b) Performing review on the sufficiency of senior management oversight; and

(c) Evaluating whether issues arising from the fixing process (e.g. inquiries from the administrator of benchmark) are thoroughly followed up and resolved.

A9.4 Reports should be prepared on the review results and submitted to senior management. In particular, any anomalies identified in the review process should be highlighted, so that corrective actions could be taken in a timely manner.
A9.5 Where the review uncovers material breaches or unethical/abusive behaviors in the rate submission process, the Chief Executive Officer and/or the Board of Directors, as well as the benchmark administrator and the HKMA, should be immediately informed.

A10 Handling complaints and whistleblower reports

A10.1 AIs should establish and implement policies and procedures for handling complaints arising from the benchmark setting process, as well as reports made by submitters, approvers, and other whistleblowers, including:

(a) Proper recording of all complaints and reports;
(b) Timely allocation of sufficient and independent staff resources to review and investigate these complaints and reports;
(c) Review and follow-up by the chief compliance officer(s) or his designee of such complaints and reports; and
(d) Reporting of material complaints to the Chief Executive Officer and/or Board of Directors, the administrator and the HKMA if they suspect that any person is involved in manipulation of the benchmark.

A11 Timely submissions

A11.1 AIs should implement and maintain systems with appropriate resiliency to support the timeliness and accuracy of submissions, and that are adequate to ensure the consistent and timely delivery of submissions.

A11.2 Regular review and periodic testing should be performed to ensure the timely process of benchmark submissions.
Annex B: Code of Conduct for Reference Banks for TMA’s CNH Hong Kong Interbank Offered Rate

Structure

PART I – INTRODUCTION

B2. Objectives
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PART I – INTRODUCTION

B1 Status of the Code of Conduct

B1.1 This Code of Conduct (Code) is developed by the Treasury Markets Association (TMA) and the Hong Kong Association of Banks (HKAB) has been consulted in the process. The Code is endorsed by the Hong Kong Monetary Authority (HKMA) and is issued under §7 of the Banking Ordinance as a statutory guideline.

B1.2 HKMA expects AIs which are benchmark submitters to comply with the Code. All benchmark submitters shall confirm with the administrator adherence to this Code annually (including any changes to this Code that may be effected during the year). HKMA will monitor compliance as part of its regular supervision.

B1.3 In order to cope with changes in market conditions, the Code should be regularly reviewed such that enhancements can be introduced where appropriate and necessary. It is envisaged that the Code will continue to evolve to take into account new market developments, as well as new international standards on industry best practices to be observed in the setting of financial benchmarks.

B1.4 This is the first edition of the Code and is effective from 23rd August 2013. Institutions should take active steps to comply with the provisions as quickly as possible. They should achieve full compliance within 6 months of the effective date.

B2 Objectives

B2.1 The Code is intended –

a. to set out reference banks’ obligation to contribute and to ensure integrity of rate fixing
process for the TMA’s CNH \(^3\) Hong Kong Interbank Offered Rate (or CNH HIBOR);

b. to provide guidance to reference banks in the rate contribution process;

c. to promote discipline amongst reference banks in submitting reference rates;

d. to strengthen internal control amongst reference banks in submitting reference rates;

e. to increase the transparency of the benchmark fixing process; and

f. through the above, to foster confidence in the CNH HIBOR fixing framework.

### B3 Communication to staff

B3.1 Reference banks should ensure that all staff involved in the benchmark fixing process are given a copy of this Code and are asked to study it before they start performing their duties. This code should also be made readily available to all staff, for instance, uploaded on the intranet, to ensure that they have easy and ready access to it when they want.

### PART II – GUIDANCE ON RATE CORROBORATION PROCESS (GRCP)

#### B4 Procedures for rate corroboration process

B4.1 Reference banks should develop comprehensive and clear written procedures to guide the rate corroboration process for the purpose of CNH HIBOR submission. The procedures should adhere to the following guiding principles.

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\(^3\) CNH means the CNY used in Hong Kong for the purpose of this Code.
B5 Guiding principles for rate corroboration process

B5.1 CNH HIBOR submissions should be explicitly and transparently supported by transaction data.

B5.1.1 According to the definition of CNH HIBOR, reference banks are asked to provide their “estimated offer rates at which deposits in CNY are quoted to prime banks in the Hong Kong interbank market at 11:00 a.m.” To provide sufficient credibility to the CNH HIBOR fixing mechanism, such estimation should be explicitly and transparently supported by transaction data. Such transactions should be conducted at an arm’s length to ensure their bona fide nature.

B5.1.2 Reference banks should devote sufficient resources to collect relevant transaction data in an effective, organised, and timely manner. Subject to confidentiality consideration, such transaction data should be made available to the submitter in a timely manner for rate corroboration purpose.

B5.2 Reference banks should develop a clear hierarchy of transaction data relevant to the CNH interest rates.

B5.2.1 To achieve adequate transparency and consistency in the use of transaction data, reference banks should construct a clear hierarchical structure of CNH interest rates in the order of their relevance to the definition of CNH HIBOR. Submitter should under normal circumstances follow the hierarchy in determining rates to be submitted.
B5.2.2 While the hierarchy of CNH interest rates might change over time due to changes in the relative market liquidity of different CNH interest rate instruments, a typical hierarchy under the prevailing market condition is as follows:

(a) Directly relevant transactions

- Where the reference bank is a prime bank, both its borrowing from any bank and its lending to other prime banks are considered directly relevant.

- Where the reference bank is a non-prime bank, its lending to other prime banks is considered directly relevant. Nevertheless, its borrowing from other banks, be they prime or not, can only be regarded as indirectly relevant.

(b) Indirectly relevant transactions

- CNH swap offer rate as implied from USD/CNH FX swap.

- CNH HIBOR rates as suggested by derivative instruments including CNH forward rate agreements.

- CNH interest rates of unsecured short term instruments issued by prime banks, e.g. negotiable certificates of deposit (NCD).

- Non-HIBOR CNH interest rates: e.g. CNH repo rates, other credit risk free rates such as the overnight index swap (OIS), and unsecured...
lending rate to a non-prime bank

(c) Quotes by money brokers offered to prime banks, with higher priority given to firm quotes (i.e. quotes with dealing prices)

B5.3 Submitters should exercise expert judgement in an objective and consistent fashion.

B5.3.1 To ensure submissions made are representative of the CNH HIBOR definition, reference banks should, in adhering to the established hierarchy of transaction data, exercise judgement to (i) assess the quality of transaction data and (ii) determine whether and how adjustments should be made to transaction data.

B5.3.2 In exercising expert judgment, submitters should consider, among other factors, the following factors:

(a) Reliability of transaction data – Transactions entered into by the reference banks themselves are considered the most reliable. Reference banks therefore should endeavour to put in place arrangement to compile such data in a format that can be revealed to the submitters. In cases of Chinese-Walls controls prohibiting exchange of trading information between different dealing desks, consideration should be given to providing sanitized data such that no sensitive information will be revealed. Reference banks may be able to obtain market transaction data through market intelligence. Their reliability varies,
depending on the source of information; and they are considered less reliable as compared to the reference banks’ own transactions.

(b) *Trading time of supporting transactions and market volatility* – The smaller the time gap between the time of transactions and the time of submission is, the more relevant the transactions are. In a more volatile market a smaller time gap would be required, while in a stable market a longer time gap can be tolerated. There could be circumstances when a market shock emerged but quickly dissipated. Transactions occurred during that short period of shock, even if it is close to the submission time, may be considered less relevant.

(c) *Reasonableness of transaction size* – The size of the supporting transactions should be of reasonable sizes in order to be relevant. There is no hard and fast rule as to what is reasonable and judgement is therefore needed. To facilitate consistent exercising of judgement along the size dimension, reference banks should regularly compile statistics to support their judgement. If for example statistical data suggest that a ticket size of CNH 20 million is not uncommon, reference banks should accept transactions of this size as relevant unless there are strong justifications suggesting otherwise.

(d) *Basis differences between different CNH interest rate markets* – In referencing indirectly relevant
transaction data, appropriate adjustments should be made to ensure the submission is representative of the CNH HIBOR definition. Reference banks should develop techniques regarding the adjustments that need to be applied under different market scenarios. These techniques should be documented and approved by the senior management overseeing the CNH HIBOR fixing process (e.g. Treasurer) as well as independent reviewers (e.g. risk manager or external professional firms). The effectiveness of these techniques should be assessed regularly with a view to making necessary refinements. Amongst other things, adjustments are normally made for one or more of the components of CNH HIBOR as set out in para. B5.4 below.

**B5.4 Reference banks should develop a structured and documented approach towards CNH HIBOR submission.**

B5.4.1 Reference banks should develop a structured approach to analyse the composition of CNH HIBOR. Such structural analysis should be comprehensively documented and approved by the senior management overseeing the CNH HIBOR fixing process as well as the independent reviewers.

B5.4.2 In referencing indirectly relevant transactions, submitters should exercise judgment according to the framework outlined by the approved structural analysis. If special market circumstances arise, rendering it justifiable for the
submitters to make necessary adjustments for factors not covered in the analytical framework, the submitters should document the justifications for review by the senior management overseeing the CNH HIBOR fixing process as well as the independent reviewers.

B5.4.3 In developing a structural analytical framework for consideration of making adjustments in referencing indirectly relevant transactions, reference banks may adopt a modular approach which regards CNH HIBOR as comprising the following components, amongst others:

(a) **Interest rate** – This refers to credit-risk-free rate. Typical sources of reference include the rates on OIS or yields of RMB denominated paper issued by the Central Government in Hong Kong. It is noted that the latter can also be affected by other factors such as market liquidity.

(b) **Credit risk premium for prime banks** – This component is not easily observable because it mingles with other components, including market liquidity risk premium and funding liquidity risk premium as set out in paras B5.4.3(c) and B5.4.3(d) below. In assessing whether adjustment should be made for this component, reference banks may take into account relevant price information such as credit default swap (CDS) spreads of prime banks and market yields of senior unsecured debt they issued.
(c) Market liquidity risk premium – If there are relevant market information indicating that market liquidity for the unsecured wholesale funding market has materially improved (or deteriorated), reference banks should exercise judgment to adjust their submissions downward (or upward) to reflect the changes in market liquidity risk premium.

(d) Funding liquidity risk premium – For liquidity risk management purpose, banks are willing to pay a higher price to secure more stable and longer term funding, and they will similarly charge a higher price for providing funding liquidity in the form of unsecured interbank lending.

B5.4.4 With the support of a structural framework, reference banks should demonstrate consistent application of expert judgment. Specifically, indirectly relevant transactions should be used only when direct ones are lacking. Moreover, the methods used for making adjustments on directly relevant transactions should be consistently applied. In circumstances that warrant changes to such methods, documented justifications should be maintained for audit trail purpose.

B5.5 Techniques to be used for making estimation should be approved by independent reviewers, such as the risk manager.

B5.5.1 When making adjustments based on indirectly relevant transaction data, banks may adopt various techniques. Proprietary techniques are acceptable provided that
they are supported by diligent analysis and satisfactory back-testing results.

B5.5.2 Standardised techniques such as interpolation or extrapolation can be used as a last resort if reference banks lack data to support a submission. Another commonly used technique is by inference. For instance, if a reference bank judges that its credit standing relative to prime banks has remained stable, it may observe the changes of its own funding cost and use them to infer the funding cost of prime banks.

B5.6 Reference banks should establish criteria for identifying prime banks.

B5.6.1 Prime banks are usually characterised by good credit rating, a broad funding base, good reputation, and a strong balance sheet.

B5.6.2 Reference banks should establish criteria, taking into account the characteristics mentioned in para. B5.6.1 above, for identifying prime banks. For operational efficiency, reference banks should maintain an internal list of counterparties which they regard as prime banks. The list should be subject to independent reviews, e.g. by the risk manager responsible for bank credit. While submitters may propose that certain banks be taken out from or be included in the list of prime banks, justifications should be provided for approval by the independent reviewer.

B5.7 Reference banks should develop effective procedures for rate corroboration with clear audit trail.
B5.7.1 Rate corroboration is a high frequency and time critical task. It has to be conducted every working day at a pre-specified time. It is therefore desirable to automate the rate corroboration process as far as possible, which forms a basis for the submitters to exercise expert judgement. It is desirable for the process to be clearly documented for subsequent reviews by independent parties.

B5.7.2 Reference banks should develop their rate corroboration process based on their own operational environment and management information system. Below illustrates one form of design:

(a) A CNH transaction data report should be compiled daily. The report should be able to show all transactions categorised in accordance with the hierarchy of CNH transactions as approved by the reference banks.

(b) The report should also contain qualitative data, including those covered in paras B5.3.2 (a) – B5.3.2 (c) above, which will enable the submitters to decide whether the data should be relied on.

(c) Based on approved techniques, the report may be automated to provide a preliminary estimation of CNH HIBOR based on different data sources. Techniques are available to infer CNH HIBOR from different instruments mentioned in para. B5.2.2.

(d) The step described under para. B5.7.2(c) should provide a range of
estimated CNH HIBOR for reference by the submitters. Based on these estimates and taking into account the quality of the corresponding data support, submitters would be in a position to exercise judgement on the final rate to be submitted.

(e) In a stable market environment, the reasoning behind the submitters' judgement would not vary significantly from one day to the next. The reporting burden of the submitter should be minimal in this scenario. However, when market conditions change so significantly that the reasoning behind expert judgement has to be modified, the submitters will need to explain in greater detail the modified reason supporting the judgement.

(f) The daily reports and the submitters' documentation on their judgements (including those under special circumstances as mentioned in para. B5.7.2(e) above) should be properly retained for audit trail purpose.

**PART III – RECOMMENDATIONS FOR BENCHMARK SUBMITTERS**

**B6 Organisational and governance arrangements**

**B6.1 Senior management oversight**

B6.1.1 AIs should designate the senior executives\(^4\) for the treasury, risk control and compliance functions to oversee, and be accountable for,

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\(^4\) These senior executives should be the respective Managers as defined in the Fourteenth Schedule of the Banking Ordinance.
all matters relating to the benchmark submission process. Among them, the senior executive for the treasury function shall assume primary responsibility for ensuring the integrity and credibility of the benchmark submission process.

B6.1.2 The senior executives should ensure that the AI develops, implements and enforces policies and procedures for the following:

(a) Collection and compilation of benchmark submissions, and ensuring compliance with the GRCP of this Code;

(b) Internal authorization to conduct rate submission, submitter/approver control (see para. B6.3) and adherence to the four-eye principle in the rate submission process;

(c) Ethical standard (see para. B7.1), segregation of duties (see para. B7.2) and physical separation (see para. B7.4.2) to address possible conflicts of interest that may arise from the AI’s role as both the contributor and user of the reference rate;

(d) Effective systems of control, including but not limited to proper retention of records and periodic independent reviews of the rate submission processes;

(e) Handling complaints and whistleblower reporting mechanism; and

(f) Adequate systems of control to ensure the consistent and timely delivery of submissions.
B6.2 Benchmark submission

B6.2.1 Submitters should try their best to collect and review transaction data that are relevant to the rate submission process before every rate submission.

B6.2.2 Submitters should make reference to the hierarchy of transactions set out in the GRCP to support their benchmark submissions.

B6.2.3 Where judgment is applied on the directly relevant or indirectly relevant transaction, submitters should ensure that such judgment is applied in a consistent and professional manner, and in compliance with their AIs’ approved techniques for making adjustment and the GRCP.

B6.2.4 Submitters should record the factors, adjustment and considerations that were used to determine the submissions. In particular, they should identify any relevant transactions that were excluded from the determination of the submission(s) and the basis for such exclusions, as well as identifying all transactions given the greatest weight or considered to be the most relevant, and the basis for such conclusion.

B6.3 Submitter-approved arrangement

B6.3.1 AIs should put in place a submitter-approved process and assign the right personnel for these roles to ensure the process is conducted in an independent and professional manner.

B6.3.2 Submitters should possess sufficient
experience in the relevant markets. Approvers should possess sufficient expertise and seniority so as to challenge the rates proposed by the submitter.

B6.3.3 Als should ensure there are back-up arrangements for periods of absence by the submitter and the approver. The back-up staff should also possess experience in the relevant markets and should preferably be someone who works routinely with the approver and/or the submitter.

B6.3.4 The role and responsibility of the designated submitter and approver, including their alternates, should be well defined and properly documented in the bank’s policies and procedures; their authorization should be clearly set out in writing.

B6.3.5 Submitters and approvers should be given sufficient training and guidance on the rate determination process, as well as this Code, and other ethical standards that they are expected to meet in their roles.

B6.3.6 The approver should review all relevant information, as well as the judgement made by the submitter, before approving and signing-off the proposed rates for submitters’ submission.

B7 Conflicts of interest

B7.1 Ethical standards for staff

B7.1.1 Als should develop a set of ethical standards specifically addressing the benchmark fixing process. Among other things, the following should be observed:
(a) Staff should act with integrity in carrying out his/her duties in relation to the benchmark fixing process. In the case of benchmark submitters and approvers, acting in integrity means the determination of rates should be based on the sole objective of reflecting the definition of benchmark.

(b) Staff who have access to or are in control of the benchmark submission process should provide adequate safeguards to prevent its abuse or misuse. They should not use any such information made available to them in the course of their duties in return for monetary rewards or personal interest or to disclose such information other than for the purpose of benchmark fixings.

(c) It is acknowledged that the submitters are usually dealers of the money market desk. Staff should endeavour to minimise the conflicts of interest problem through ensuring their independence in the rate submission process.

(d) Staff should immediately report to at least one of the senior executives responsible for the benchmark submission process or their designates if they suspect that any person

(i) is manipulating or has manipulated a benchmark;

(ii) is attempting to or has attempted to manipulate a benchmark; or
(iii) is colluding in or has colluded in the manipulation or attempted manipulation of a benchmark.

(e) Staff responsible for contributing or approval of benchmark should not deal in financial instruments that are valued or settled with reference to the benchmark unless approval is granted by their supervisors. A copy of the application and approval should be retained by the compliance office.

B7.1.2 AIs should communicate clearly to their staff the ethical standards expected from them and require them to sign off the relevant code.

B7.1.3 AIs should develop training programmes (e.g. forming part of the induction course for new recruits and of refresher courses for existing staff) and remind staff of the requirements of the Code at periodic intervals (e.g. through issuance of circulars) to ensure staff familiarise themselves with these standards.

B7.2 Segregation of duties

B7.2.1 To address the possible conflicts of interest issue arising from the reference bank’s role as both the contributor and user of the reference rates, reference banks should put in place appropriate controls, including but not limited to:

(a) Clear segregation of duties between staff involved in the rate corroboration process and staff involved in proprietary trading of interest rate derivatives. Under no circumstances should the AIs’
interest rate derivatives traders act as the AIs’ benchmark submitter.

(b) Submitters, supervisor and any parties designated to make submissions when the submitters are absent shall not be assigned any roles in derivatives trading desk, unit or division within the AI.

B7.3 Remuneration policy

B7.3.1 AIs should be mindful of the possible incentives for benchmark manipulation in formulating its remuneration policies and take active steps to reduce such incentives.

B7.4 Submitter’s communication

B7.4.1 Submitters are required to conduct all business related to the AI’s submissions on the AI’s recorded telephone and electronic communications systems, and not on personal telephones or other electronic devices.

B7.4.2 AIs should bear in mind the conflicts of interest issue in drawing up the sitting arrangements for the submitters and the traders who primarily deal in derivatives products that reference the benchmark. More specifically, the two groups should not be located next to or be in close proximity to one another so as to discourage improper communications.

B7.4.3 Submitters and approvers should not involve themselves in communications, whether internal or external to the bank, that attempt to influence AIs’ submissions for the benefit of any derivatives trading
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position (whether of the AI’s or any third party) or to cause the submitter or approver to violate any applicable rules or definitions for benchmark.

#### B8 Retention of records

**B8.1** AIs should retain records relevant to the benchmark submission process for a reasonable period of time. In particular, they should keep for at least seven years, the following:

(a) records of benchmark rates submitted, including information used in the benchmark determination process and adjustments made together with their justifications;

(b) records of the submitter-approver process;

(c) records of communications with administrator or calculation agent in relation to rates submitted;

(d) records of compliance checking conducted;

(e) reports to senior management in relation to reviews conducted on the benchmark submission process; and

(f) records of submission queries and complaints, and their respective outcomes.

**B8.2** AIs should keep for at least two years records of audio communications between the benchmark submitting staff and other third parties.

**B8.3** AIs should make readily available all relevant records to the HKMA in a timely manner upon request.

#### B9 Independent reviews

**B9.1** AIs should develop commensurate independent
review processes. Such process should include (a) quarterly regular review, (b) unscheduled compliance check, and (c) annual audit review except for the year where the submission process is subject to an external audit. An external audit review should also be conducted every 2-3 years.

B9.2 While the scope of the review may vary between AIs, at a minimum, the quarterly review should cover:

(a) Assessing the reasonableness of rates contributed, by conducting back-testing analysis, including but not limited to:

(i) Comparison with AIs’ own transaction data; and

(ii) Comparison with other panel banks’ data (e.g. frequency of results trimmed, deviation of submissions from fixing results).

B9.3 For the other reviews, the scope should include:

(a) Ascertaining the proper maintenance of records of the rates corroboration and submission process, including data used and justifications for any departure from the normal rate corroboration process;

(b) Performing review on the sufficiency of senior management oversight; and

(c) Evaluating whether issues arising from the fixing process (e.g. inquiries from the administrator of benchmark) are thoroughly followed up and resolved.

B9.4 Reports should be prepared on the review results and submitted to senior management. In particular, any anomalies identified in the review process should be highlighted, so that corrective actions could be taken in a timely manner.
B9.5 Where the review uncovers material breaches or unethical/abusive behaviors in the rate submission process, the Chief Executive Officer and/or the Board of Directors, as well as the benchmark administrator and the HKMA, should be immediately informed.

B10 Handling complaints and whistleblower reporting

B10.1 AIs should establish and implement policies and procedures for handling complaints arising from the benchmark setting process, as well as reports made by submitters, approvers, and other whistleblowers, including:

(a) Proper recording of all complaints and reports;

(b) Timely allocation of sufficient and independent staff resources to review and investigate these complaints and reports;

(c) Review and follow-up by the chief compliance officer(s) or his designee of such complaints and reports; and

(d) Reporting of material complaints to the Chief Executive Officer and/or Board of Directors, the administrator and the HKMA if they suspect that any person is involved in manipulation of the benchmark.

B11 Timely submissions

B11.1 AIs should implement and maintain systems with appropriate resiliency to support the timeliness and accuracy of submissions, and that are adequate to ensure the consistent and timely delivery of submissions.

B11.2 Regular review and periodic testing should be
performed to ensure the timely process of benchmark submissions.