

Treasury Markets Association CODE OF CONDUCT AND PRACTICE

Treasury Markets Association Code of Conduct and Practice

Latest version published on 20 November 2023

Copyright

The copyright for the Code of Conduct and Practice is held by the Treasury Markets Association. No part of the publications may be reproduced without its prior consent.

Version 1: Published in July 2011
Version 2: Published in March 2014
Version 3: Published in June 2017

Contents

Fc	rewo	ord	5
ı.	Dis	claimer	8
II.	Inti	roduction	9
	1.	Purpose	9
	2.	Products covered by the Code	9
	3.	Compliance	. 10
	4.	Updates and revisions	. 10
Ш	. Gen	eral Standards	. 11
	1.	Compliance with laws and regulations	.11
	2.	Confidentiality	. 11
	3.	Professional knowledge	. 13
	4.	Conflicts of interest	. 13
	5.	Diligence	. 13
	6.	Honesty and fairness	. 14
IV	. Gen	eral Controls	. 16
	1.	Prevention of money laundering and counter terrorist financing	. 16
	2.	Fraud and other criminal activities	. 16
	3.	Segregation of duties	. 17
	4.	Dealing for personal accounts	. 17
	5.	Dealing using a connected money broker	. 18
	6.	Complaints procedure	. 19
	7.	Uninterrupted leave	. 19
	8.	Entertainment and gifts	. 20
	9.	Gambling	.21
	10.	Personal indebtedness	.21
	11.	Abused substances (including drugs and alcohol)	.21
	12.	Staff responsibility in relation to password control	.21
٧.	Dea	aling Principles	. 21
	1.	Authorization and responsibilities for dealing activities	. 22
	2.	Price / rate quotation	. 22

3.	Dealing size	24
4.	Dealing terminology	24
5.	Deals at off-market rate	25
6.	Value dates and fixing dates	25
7.	Dealing mandates	26
8.	Telephone recordings	26
9.	After-hours or off-premises dealing	27
10.	Use of mobile phones for transaction business	28
11.	Stop-loss orders	28
12.	Approval of money brokers	29
13.	Role of money brokers	29
14.	Disclosure of names by money brokers	29
15.	Deals arranged through money brokers	30
16.	Commission and brokerage	32
17.	Electronic broking	32
18.	Market disruption / unforeseen bank holidays	33
19.	Contingency planning	34
20.	Internet and electronic trading	34
21.	Mistrade and disputes	35
22.	Misinformation and rumours	36
23.	Code of Conduct for Benchmark Submitters	36
VI. Ri	sk Management Principles	37
1.	Risk management framework	37
2.	Types of risks	38
3.	Techniques for risk measurement	39
4.	Risk management limits	40
5.	Risk mitigation	42
6.	Risk monitoring and reporting	42
7.	New products, services, and procedures	43
VII. Ba	ack-Office Practice	45
1.	Confirmation procedures: oral deal checks	45
2.	Confirmation procedures: Written / Electronic Confirmation	46
3.	Deal amendment and cancellation	47
4.	Deal capture, reconciliation, and escalation procedures	47

5.	Payment / settlement instructions	48
6.	Settlement of Differences	49
7.	Late Payment Penalties	49
VIII.M	arket Specific Dealing Practices and Conventions	50
1.	Foreign exchange	50
2.	Money market	51
3.	Debt securities	52
4.	OTC derivatives	54

Foreword

I am very pleased to be presenting the Treasury Markets Association's (TMA) Code of Conduct and Practice. Since the incorporation of the TMA in 2005, it has been one of the goals of the Association to develop and promote appropriate codes and standards for the treasury markets. With its launch, I am confident that the TMA's Code of Conduct and Practice will provide guidance as an important industry benchmark for market practices.

The TMA's Code of Conduct and Practice has drawn upon international best practices and refined them in order to best suit the specific conditions and markets within Hong Kong. The current version of the Code covers a wide range of financial products traded in wholesale treasury markets, including foreign exchange, money market instruments, debt securities, over-the-counter derivatives, repurchase agreements (repo), commodities, credit derivatives and other structured products. Dealing practices for repo, commodities, credit derivatives and other structured products will be covered in the second phase of the Code's development¹.

The recent global crisis has highlighted the dangers of unchecked financial innovation and insufficiently regulated market behaviour. At the same time, however, it is perhaps neither adequate nor desirable for legislative regulations to be the sole curb moderating the actions of market participants. Instead, with the promotion of market professionalism as one of its aims, the TMA hopes to encourage and demonstrate the self-discipline of professional market participants through their ability to regulate and monitor their own behaviour. The TMA's Code of Conduct and Practice is a comprehensive guide that will aid individuals and institutions in shaping their decisions in a principled and responsible manner.

As markets across the world become increasingly globalized and interconnected, hardware and physical infrastructure is no longer sufficient to secure a region's competitiveness as a financial centre. Rather, it is a location's professional expertise and soft skills that set it apart. I look forward to seeing the TMA's Code of Conduct and Practice play a pivotal role in raising the already high bar of

5

¹ Please also see Chapter II, section 2

professionalism and ethical conduct within the region and in further promoting Hong Kong's reputation as an international financial centre.

Finally, I would like to express my deep appreciation and gratitude to the members of the Market Practices Committee as well as the Working Group on the TMA Code of Conduct and Practice. Without their astute guidance and dedication to the work of the TMA and this initiative, the completion of the Code of Conduct and Practice would not have been possible.

Eddie Yue

Chairman

Treasury Markets Association

July 2011



Congratulations

Thomson Reuters is honoured to support the development of the Treasury Markets Association's (TMA) Code of Conduct and Practice. With the launch of the TMA's Code of Conduct and Practice, we are confident it will lay a solid foundation for further enhancing Hong Kong's status as a global financial centre.

Michael Tsang

Managing Director, Treasury, Asia

Thomson Reuters

I. Disclaimer

While extreme care has been taken to ensure the consistency of this Code of Conduct and Practice with relevant ordinances, regulations and guidelines, if any inconsistency occurs, the latter should take priority over the Code. It should also be noted that this Code is not legally binding, although it does refer to ordinances, regulations or guidelines which themselves are, or may be, binding. Where there are doubts on whether a certain transaction fully complies with legal, regulatory and contractual requirements, market participants should seek legal and other relevant professional advice.

This Code does not purport to be an exhaustive guide on market conduct and practice. Market participants should not rely on it alone to formulate their risk management strategies and policies.

The Treasury Markets Association (TMA), its Council Members, Executive Board Members, Committee/Sub-committee/Working Group Members, and TMA Secretariat staff and office staff shall not be liable for any loss or damage suffered as a result of any use of, or reliance on, the contents of this Code.

In the case of any discrepancies between the English and Chinese versions, the English version shall prevail.

II. Introduction

1. Purpose

Healthy and sustainable development of financial markets is buttressed by the professionalism and integrity of market practitioners. Established in November 2005, the Treasury Markets Association (TMA)'s mission is to further promote the professionalism and competitiveness of the treasury markets in Hong Kong through, among other things, developing appropriate codes and standards. With the assistance of market experts, the Association has distilled best practices in international and domestic treasury markets to formulate this Code of Conduct and Practice.

For avoidance of doubt, this Code of Conduct and Practice, which covers treasury market activities in Hong Kong, is applicable to the Hong Kong operations of international financial institutions. In respect of overseas operations of Hong Kong incorporated financial institutions, the institutions concerned are advised to honour the spirit of the Code and the standards set out herein, having regard also to local regulatory requirements and market conditions.

By spelling out clearly the expectations on the various participants in a market transaction, this Code serves to minimize misunderstanding and disputes. Should disputes occur, it provides an objective and impartial basis for the involved parties to resolve their differences. It also assists the Association in carrying out investigations into possible complaints in relation to the conduct of any members.

The Code represents a shared vision of treasury market participants to safeguard and further promote Hong Kong's status as an international financial centre through exemplary professional and ethical standards. We urge each and every participant, both institutions and individuals, to familiarize themselves with the Code, and make every effort to comply with it.

2. Products covered by the Code

This Code covers a wide range of financial products traded in wholesale treasury markets, including:

- (a) Foreign exchange (including FX derivatives) note that these activities shall be covered by the FX Global Code²;
- (b) Money market instruments;
- (c) Debt securities;
- (d) OTC derivatives other than FX derivatives (e.g. interest rate options, FRA, IRS, etc.);
- (e) Repurchase agreements (repo);

9

² http://www.globalfxc.org/

(f) Commodities; and

(g) Credit derivatives and other structured products.

Dealing practices for products listed in (e) to (g) above may be included in the future phase of the

development of this Code when deemed necessary.

3. Compliance

Although the Code does not have the force of law, it lays down the standards for the conduct of

market transactions in a fair, honest and prudent manner. It is therefore important for dealers and money brokers in treasury markets to comply with the Code to ensure efficient and well

functioning markets.

While the Code aims at a comprehensive coverage, treasury markets are constantly evolving as a

result of new products and technologies. Market participants are advised to discern the principles

behind the standards set out in the Code, and extend such principles to the new products and

technologies.

When a possible breach of the Code is brought to the attention of TMA, we stand ready to look

into it. As and when warranted, the disciplinary procedures as set out in the TMA Bye-laws may

be invoked. Where appropriate, the cases may be referred to the relevant regulatory authorities.

Updates and revisions

The Code will be reviewed by TMA as and when the need arises. Updates and revisions will be

announced to members on the TMA website (www.tma.org.hk), as well as through TMA E-news

and TMA newsletters.

If members have any suggestions or comments on the Code, they are most welcome to write to

us at the following address:

TMA Secretariat

55/F., Two International Finance Centre

8 Finance Street, Central, Hong Kong

Tel: (852) 28159920

Fax: (852) 28159931

Email address: tma@tma.org.hk

10

III. General Standards

This chapter sets out the general standards expected of market participants across the markets covered in this Code.

1. Compliance with laws and regulations

1.1 Market participants should familiarize themselves with, and abide by, all the laws and regulations, as well as codes, circulars and guidelines issued by applicable regulatory authorities (whether or not having the force of law) relevant to their operations in Hong Kong and elsewhere, in addition to those highlighted in the respective sections below. Members that are not supervised by any regulatory authorities are advised to use the supervisory guidelines issued by the regulatory authorities as a reference in formulating their policies, procedures and internal controls.

2. Confidentiality

- 2.1 Market participants should exercise utmost care in observing confidentiality and preserving client anonymity.
- 2.2 Safeguards put in place by management should include, but not be limited to, the following:
 - (a) Well documented policies and procedures for ensuring confidentiality of information, preventing insider dealing and honouring client anonymity;
 - (b) Requirement on all relevant employees, agents and subcontractors to sign a confidentiality undertaking, which is to be binding during and after the expiry of the employment (and other) agreements;
 - (c) Training to assist staff in identifying and handling confidential or sensitive information; and
 - (d) Disciplinary mechanism for investigating and dealing with breaches of confidentiality.
- 2.3 Staff members have a shared responsibility in maintaining confidentiality. They should:
 - (a) familiarize themselves with the relevant laws and regulations governing the collection, handling, use and disclosure of information;
 - (b) resist pressure to divulge confidential or sensitive information, and promptly report such cases to management; and

(c) make a report immediately to management of any confidential or sensitive information that has been divulged.

Upon receipt of reports from staff in (b) and (c) above, management should immediately invoke the disciplinary mechanism as mentioned in 2.2(d).

- 2.4 Market participants should not divulge any information relating to the deals transacted or being transacted, except when express permission from the parties involved is obtained, or when names of the principal contracting parties are released to the counterparties involved in a transaction under accepted terms of disclosure, or otherwise compelled by law or court order.
- 2.5 Even in respect of information disclosure to counterparties, premature release should be avoided. A money broker should reveal the names of the principals only when he/she is satisfied that both sides have serious intention to enter into the transaction.
- 2.6 Dealers should not solicit information from money brokers through improper channels. Any inducements, threats or indications, explicit or implicit, that business from the dealer(s) is linked to divulgence of confidential or sensitive information should be strictly forbidden.
- 2.7 To avoid suspicions of information divulgence and risks of inadvertent divulgence, dealers and money brokers should bear in mind the following:
 - (a) They should not visit the dealing rooms of other market participants unless with the permission of their management, as well as the management of the institutions they visit. Dealers should refrain from concluding a deal in the dealing room of other market participants.
 - (b) Care should be exercised in the use of loudspeaker equipment to prevent a breach of confidentiality. Such devices should not be used when discussions may involve confidential or sensitive information. Likewise, market participants should avoid discussion of confidential or sensitive information in public places where it may be overheard.
 - (c) Market participants should be satisfied with the security standards of modern communication technologies and take all necessary steps to prevent information leakage before such devices are used to convey confidential or sensitive information.
- 2.8 Where disclosure is required by laws and regulations, management and staff should comply, and co-operate fully with the regulatory authorities.

3. Professional knowledge

- 3.1 Management should ensure that their staff have the necessary knowledge and expertise in treasury operations and are capable of carrying out their duties. This involves at least the following:
 - (a) Recruitment policy that ensures the hiring of staff with appropriate qualifications and experience;
 - (b) On-going training to familiarize staff with market practices and standards, and internal policies to encourage staff to obtain relevant professional qualifications; and
 - (c) Training to promote awareness to, and knowledge of, new market developments, such as new treasury products and technologies.
- 3.2 Institutions with significant trading operations should consider bringing in independent directors with strong expertise in the management of complex capital market and trading operations.

4. Conflicts of interest

- 4.1 Any actual or perceived conflict of interest should be strictly avoided in a market transaction to ensure fairness in the treatment of counterparties. Staff should be trained to identify situations that may potentially arouse concerns. A disclosure mechanism should be set up, and controls should be put in place to handle the conflicts in a manner that would effectively eliminate concerns about unfair treatment.
- 4.2 Management of an institution should clearly define what constitutes "a material interest" in a transaction conducted for a client. The institution should refrain from advising or dealing in such a transaction unless appropriate disclosure of such material interest has been made to the client and all other reasonable steps have been taken to ensure that the client is treated fairly.

5. Diligence

- 5.1 When an institution acts for its clients in a business transaction, it should exercise due care and diligence, bearing in mind the best interest of the clients.
- 5.2 Specifically, an institution should take reasonable steps to ensure the following:
 - (a) Prompt execution of client orders in accordance with clients' instructions;
 - (b) Execution of client orders on the best available terms;
 - (c) Fair allocation to the respective client accounts if more than one client is involved;
 - (d) No withdrawal or withholding of client orders except under conditions stipulated in the contractual agreement; and
 - (e) Placing clients' best interest always as the first priority in providing services or recommending the services of an affiliated person to them.

6. Honesty and fairness

- 6.1 An institution should conduct its business in an honest and fair manner, safeguarding the integrity of the market. Fraudulent, deceptive and manipulative practices should be strictly forbidden.
- 6.2 In advising or acting on behalf of a client, an institution should exercise utmost care in the following respects:
 - (a) Avoid making misrepresentations or passing inaccurate or misleading information to clients;
 - (b) Ensure that clients fully understand the nature and potential risks of the products offered to them before the transactions are concluded. This is especially important for complex transactions (such as some derivatives) and new financial products; and
 - (c) Ensure that the nature, complexity or risks of the proposed transactions are appropriate for the clients, having regard to their financial objectives, educational background, investment experience and financial literacy, etc. Other requirements as set out in the guidelines and regulations issued by the relevant authorities should also be taken into account.
- 6.3 All market participants should acquaint themselves with their obligations under the relevant legal and regulatory requirements. For example, there are prohibitions under the Prevention of Bribery Ordinance (Cap. 201) for an agent (normally an employee) to solicit or accept an

advantage without the permission of the principal (normally the employer) when conducting the principal's business. A person who offers the advantage may also commit an offence.

IV. General Controls

This chapter highlights the general controls that should be instituted within an organization to ensure clean and honest practices.

1. Prevention of money laundering and counter terrorist financing

- 1.1 An institution should have a clear understanding of all relevant laws and regulations on the prevention of money laundering and counter terrorist financing in relation to their operations in Hong Kong and elsewhere. Examples of Ordinances in Hong Kong with provisions to cover this area are Drug Trafficking (Recovery of Proceeds) Ordinance (Cap. 405), Organized and Serious Crimes Ordinance (Cap. 455), Weapons of Mass Destruction (Control of Provision of Services) Ordinance (Cap. 526), United Nations Sanctions Ordinance (Cap. 537), United Nations (Anti-Terrorism Measures) Ordinance (Cap. 575) and Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) Ordinance (Cap. 615). For authorized institutions (Als)³ in Hong Kong, the core guidance issued by the Hong Kong Monetary Authority (HKMA) includes the Guideline on Anti-Money Laundering and Counter-Terrorist Financing, which spell out in detail the expected internal controls and measures.
- 1.2 An institution should formulate well-documented policies and procedures, and institute proper systems and controls to ensure compliance with relevant laws, regulations and guidelines. It should also make best efforts to ensure that its staff are well acquainted with those measures as well as their obligations under the relevant laws, regulations and guidelines.

2. Fraud and other criminal activities

- 2.1 An institution should take all necessary measures to prevent fraud and other criminal activities.
- 2.2 In respect of an AI, the HKMA's supervisory guidelines stipulate that its Code of Conduct should contain the requirements that all staff should be alert to matters which could give rise to fraud, deception, theft, forgery, corruption or other illegal activities. If a staff member, acting reasonably, suspects that an illegal activity is being perpetuated, he /she should immediately report it to an appropriate officer as required in the AI's Code of Conduct for appropriate follow up. ⁴ Other non-AI financial institutions or members that are not

³ An authorized institution means a licensed bank, a restricted licence bank, or a deposit-taking company in Hong Kong

⁴ See module CG-3 of the Supervisory Policy Manual issued by the HKMA.

supervised by any regulatory authorities should similarly make efforts to promote vigilance among their staff.

- 2.3 If a call relating to a transaction is received on a telephone line that is not taped, the recipient of the call should take prompt actions to verify the deal by calling back using a taped telephone line, and confirming details of the transaction. A taped telephone line should also be used when confirming standard settlement instructions.
- 2.4 Where payment is instructed to be made to a third party other than the counterparty, the institution should exercise particular caution in checking the authenticity of the instructions.

3. Segregation of duties

- 3.1 As an important risk control measure, there should be effective segregation of duties between the front office (trading) and the middle/back office (risk measurement and monitoring, and settlement and accounting, etc.) functions within an institution.
- 3.2 Clear delineation of reporting lines and responsibilities should be established to avoid ambiguity. This is especially important for those institutions that operate under a reporting structure resembling a matrix system. The roles, responsibilities and reporting obligations of staff members should be set out in writing and communicated to staff effectively. Undue influence of the front office staff on the middle/back office should be prohibited.
- 3.3 The front office and the middle/back office should be separated physically. Access to the trading room should be restricted to authorized personnel only. Where there is presence of non-dealing staff in the trading room, management should exercise judgment on whether the functions performed by those non-dealing staff may have an actual or potential conflict of interest with the trading room activities, and assess the need for a Chinese wall. Similarly, front office staff should not have access to back office, unless proper authorization has been obtained from management. Disciplinary measures should be established to penalize unauthorized access.

4. Dealing for personal accounts

4.1 An institution should lay down well defined policies and guidelines on whether it allows its dealing staff to trade for their own account, and if so, the conditions under which such trading

is allowed (e.g. the types of financial instruments that can or cannot be traded, the need for prior approval, and the reporting requirement, etc.)

- 4.2 If trading for personal account is permitted, management should put in place adequate controls against actual or perceived conflicts of interest. Insider trading and unprofessional practice such as 'front running' (where a dealer makes a personal trade prior to executing a big order placed by a client in an attempt to benefit from the anticipated price movement) should be strictly forbidden.
- 4.3 Staff who trade for their own account should understand their responsibilities to avoid actual and perceived conflicts of interest, which would harm the reputation of the institution and undermine the interest of their clients.
- 4.4 The HKMA's supervisory guidelines require Als to specify in their own Code of Conduct the requirements related to staff personal investment. No member of staff should deal in the shares or other securities of any listed company when possessing privileged or price-sensitive information that is not generally known to the shareholders of that company and to the public. Staff should also refrain from disclosing such information to any third party.
- 4.5 If staff of an AI have inadvertently been concerned in the shares or other securities of any listed companies in respect of which they possess privileged or price-sensitive information, they should immediately notify their management in writing, giving details of the deal(s) involved. If they are not certain whether a deal would constitute insider dealing, they should consult their management in advance of such dealing.⁵

5. Dealing using a connected money broker

- 5.1 Money brokers should be vigilant of any material conflict, actual or perceived, between their own interests and their responsibilities to their clients. They must disclose, with relevant details, such conflict to their clients should it exist.
- 5.2 To safeguard their independence, money brokers should respond positively to clients' requests for a written list of principals who have a material connection with them.

-

⁵ See module CG-3 of the Supervisory Policy Manual issued by the HKMA.

5.3 A money broker should ensure that any deal involving a connected principal is conducted at arm's length. On the part of the principal, it should carry out regular audit and compliance checks to guard against the use of unauthorized money brokers and unwarranted concentration in the use of money brokers.

6. Complaints procedure

- 6.1 Management of an institution should make sure that complaints received regarding trading activities are investigated promptly and objectively. The complaints and the investigation should be properly documented. Als are also required to comply with the guidelines on complaint handling procedures issued by the HKMA.⁶
- 6.2 If an institution has reason to believe that a contracting party has breached the spirit and/or the letter of this Code, it should first attempt to resolve the matter with the latter.
- 6.3 Failing a bilateral settlement, the complainant may submit the complaint / dispute to the TMA. In handling a dispute, the Market Practices Committee of the Association shall make a decision in accordance with the Rules for Over the Counter Financial Instruments Dispute Resolution of the TMA ("TMA Dispute Resolution Rules"). The financial instruments to which the Rules apply are those covered in this Code (see Chapter II, section 2).
- 6.4 As regards complaints about any breach of the Rules of the TMA or about the conduct or act done by an individual member of the TMA (i.e. a disciplinary complaint), an investigation group formed under the Disciplinary Sub-committee of the Association will conduct enquiries and investigation by applying common sense and professional judgment to the known facts and circumstances, taking into consideration the Rules of the TMA, the TMA's Code and the principle of fair dealing and equal treatment. The group will report its findings and recommend fair and proper actions to the Professional Membership Committee (PMC) of the Association. If the PMC is satisfied that a disciplinary complaint against a member has been proved beyond reasonable doubt, it has discretion to take disciplinary actions against the member concerned, which may include reprimand, and suspension or termination of membership.

7. Uninterrupted leave

7.1 Institutions should impose and strictly enforce an uninterrupted leave policy.

⁶ See module IC-4 of Supervisory Policy Manual issued by the HKMA.

7.2 Traders who are on uninterrupted leave should be strictly barred from trading, physical access to the dealing room and any remote access rights to the trading systems. They should avoid making or maintaining business contact with clients and colleagues during uninterrupted leave, unless under exceptional circumstances with proper approval given by an authorized person in the institution.

8. Entertainment and gifts

- 8.1 Management of an institution should formulate and enforce a policy on the receiving and giving of entertainment and gifts, having regard to the legal and regulatory requirements and the reputation risk to the institution.
- 8.2 The policy should address the following, among other things:
 - (a) The types of gifts and entertainment that are judged to be inappropriate or excessive. In particular, the giving and receiving of cash, or gifts that are readily converted into cash, should be strictly prohibited. Meals and entertainments that are considered extravagant should also be strongly discouraged;
 - (b) Prohibitions against the offer of entertainment and gifts that is likely to be perceived as an improper inducement by management of the recipient and by the regulatory authorities. Likewise, offers which are not considered to be ordinary course of business should be avoided. For example, it is inappropriate to invite client(s) to an entertainment event if none of the representatives of the host institution will show up;
 - (c) Ways to deal with gifts and entertainment received, especially those which are judged to be excessive but which cannot be declined without causing offence; and
 - (d) A system to record gifts, entertainment and other personal benefits permitted to be retained by staff. Such records should be regularly reviewed by control staff independent of the front office and business units.
- 8.3 Management should from time to time remind their staff of section 9 of the Prevention of Bribery Ordinance, which stipulates criminal penalties for accepting or offering advantages in prescribed circumstances.
- 8.4 Als should also acquaint themselves with section 124 of the Banking Ordinance, and the requirements on preventing bribery and corruption set out in the Supervisory Policy Manual module on Code of Conduct issued by the HKMA.

9. Gambling

9.1 Management should have in place a policy that prohibits gambling activities in the workplace, which undermine the integrity of the institution.

10. Personal indebtedness

- 10.1 Management should advise their staff against incurring excessive debt and/or undertaking high risk investment activities that are not commensurate with their financial capacity.
- 10.2 Unless prior approval is obtained from management, staff and their close relatives should not borrow or receive credit from third parties on a favoured basis or on terms that are not at arm's length.

11. Abused substances (including drugs and alcohol)

11.1 An institution should increase awareness among its staff of the signs and effects of the use of abused substances, and be vigilant of such occurrences at the workplace. The use of abused substances not only impairs the functioning of the individuals concerned, but also creates danger at the workplace.

12. Staff responsibility in relation to password control

12.1 An institution should establish policies and procedures in relation to password control, and ensure that they are properly observed by its staff.

V. Dealing Principles

This chapter sets out some key principles in dealing business. A clear understanding of the expectations on various parties not only facilitates smooth trading but also helps reduce differences and disputes.

1. Authorization and responsibilities for dealing activities

- 1.1 An institution should have proper policies and procedures for the appointment and authorization of staff engaged in dealing, including both dealers and support staff.
- 1.2 To provide clarity on the role and responsibility of the appointed dealers, management should set out the authorization in writing. Adequate training should also be provided to ensure that staff members are well aware of their roles and responsibilities.
- 1.3 The authorization should address the following, among other things:
 - (a) The types of transactions, instruments and markets that a dealer may engage in;
 - (b) The trading platform he/she has access to;
 - (c) Stop loss limits, and limits on counterparties, open positions and mismatch positions, etc.;
 - (d) Confirmation, settlement and reporting procedures; and
 - (e) Relationships with money brokers and other market participants.

An institution may make reference to its internal guidelines in drawing up the authorization.

1.4 Management is recommended, as a best practice, to communicate its list of authorized dealers to its counterparties, and to provide an update of the list should any change occur. (For avoidance of doubt, the provision of such information does not discharge an institution from its responsibilities to ensure that its dealing staff have proper authorization to trade.)

2. Price / rate quotation

- 2.1 It is imperative for every market participant to make very clear whether the price/rate he/she is quoting is firm or is merely indicative. Unless otherwise specified, prices/rates quoted by money brokers should be taken as firm in marketable amounts.
- 2.2 Market participants should not make quotes which they have no intention of honouring. If they have reasonable grounds to suspect that other participants are engaging in practices that threaten to compromise the integrity of the market, such as making a quote for immediate withdrawal for the purpose of misleading the market, they should promptly report the incident to their senior management.
- 2.3 A dealer quoting a firm price/rate has a commitment to deal at that price/rate in a marketable amount, regardless of whether the quote is made direct to the counterparty, or through a voice money broker or an electronic trading system. The only exception to this rule is where the name of the counterparty cannot be accepted (due to, for example, an exhaustion of counterparty limits), in which case the transaction has to be rejected.
- 2.4 While a principal may reject a deal when a particular name is not acceptable, he/she should not revise the price/rate when the name of the counterparty is disclosed.
- 2.5 Although prices/rates quoted in fast moving markets are generally assumed to be good for only a very short period of time, it is the responsibility of the dealer to make sure that outdated quotes through a voice money broker are taken off.
- 2.6 In a fast moving or an illiquid market, the dealer should clearly convey his/her instructions to the money broker regarding the time limit of the quote. On the part of the money broker, it is always a good practice to check with dealers from time to time on whether their quotes remain valid. However, if a dealer has clearly indicated "your risk" and the quote is hit only after a time lapse, he/she reserves the right to notify the market participant that the previous quotation is no longer valid. If a market participant needs a longer than usual time to consider the proposal, he/she should say "my risk". In this case, the previous quotation from the market maker becomes a reference price only. The market participant should ask "how now" to get another quotation from the dealer.
- 2.7 Dealers should commit to their firm bid and offer quotes through money brokers (subject to credit) until and unless the quote has been dealt on, taken off, replaced by a better bid and offer, or when the money broker has closed the transaction with another counterparty at a different price/rate.

3. Dealing size

- 3.1 Dealers should specify the size they intend to deal. To prevent possible misunderstanding, the use of generic descriptions such as "Your amount", "All yours" or "All mine" should be avoided.
- 3.2 Dealers trading in unfamiliar markets are advised to consult their money brokers or other market participants on the norm regarding a marketable amount. If the size of the deal is smaller than the marketable amount, this should be clearly stated and made known to the prospective counterparty.

4. Dealing terminology

- 4.1 Market participants should be very specific in the use of dealing terms. In particular, they should state clearly which side they are on in a transaction:
 - (a) For money market transactions borrow or lend; and
 - (b) For forward rate agreement and interest rate swaps pay or receive fixed.
- 4.2 Some other descriptions that should be stated in transactions in relation to OTC derivatives are discussed in Chapter VIII, section 4.
- 4.3 Where applicable, market participants are advised to enter into internationally recognized master agreements, especially for derivatives products such as currency and interest rate options.
- 4.4 Should there be any doubts on the use of terms in an agreement, immediate clarification should be sought with the counterparty.

5. Deals at off-market rate

- 5.1 The use of off-market price/rate should be regarded as an exceptional, rather than a normal practice. In particular, its use in extending or rolling over maturing forward contracts should be prohibited except for the purpose of meeting the genuine business need of clients. Written policies and procedures should be put in place to control such dealing activities and alert management of their occurrence.
- 5.2 Where the use of off-market price/rate is considered necessary, strict controls have to be established. Institutions should follow their internal procedures to get proper approval from management for the use of off-market price/rate. The deals must be promptly reported with audit trails kept for monitoring purposes.
- 5.3 When contracts are extended at off-market prices/rates, unrealized losses, if any, should be booked as a credit to the client, and be subject to the institution's credit risk control policy.
- 5.4 It is a good practice to include the 'big figure' in the quotations, especially during periods of rapid market movements. Where a "big figure" is absent, and a dispute regarding the quotation arises, it is unprofessional for a counterparty to 'stick' the other to the rate that is erroneously agreed, if it is obvious that the latter has misunderstood the "big figure", or if the quotation is conspicuously far off the market rate.
- 5.5 If markets are so volatile that even the "big figure" fluctuates, and there is uncertainty as to what the correct figure is, the quote that is hit should prevail.

6. Value dates and fixing dates

6.1 Market participants are strongly advised to adhere to conventions regarding value dates in respective markets. However, if it is considered necessary to adopt a value date that is different from the standard practice, this must be clearly specified when a quotation is made or requested. Otherwise, the counterparty reserves the right to adhere to the standard market practice.

6.2 To avoid possible misunderstanding, market participants are advised to provide in the quotation the exact value date(s)/fixing date(s) (where applicable) in a transaction. To forestall confusion over different date formats, it is recommended that the month be spelled out in full.

7. Dealing mandates

- 7.1 It is up to management of an institution to decide whether or not a dealing mandate is needed, and if yes, the coverage of the mandate. While dealing mandates may help clarify the nature of the counterparty relationship in some cases, they may not be necessary for all relationships (such as those between core principals).
- 7.2 Where both parties consider it desirable to establish a dealing mandate, they may address the following in the mandate:
 - (a) Nature of relationship at arm's length, advisory or other kinds of relationship;
 - (b) Confirmation and settlement procedures; and
 - (c) Other control procedures.
- 7.3 The stipulation of the control procedures in a mandate does not place the responsibility for checking or monitoring the properness of trades on the other counterparty. It remains the responsibility of an institution to ensure that its own dealing staff have the proper authority to trade.
- 7.4 A dealing mandate that has been set up should be subject to periodic review. A counterparty should notify the core principal promptly on any amendments to the existing terms of the mandate.

8. Telephone recordings

8.1 An institution is recommended to use tape recording equipment to record telephone conversations, which helps investigate and resolve differences and disputes between counterparties should they arise. The use of mobile phones which bypasses the recording system should be restricted in the dealing room (see also section 10 below).

- 8.2 Management should ensure compliance with the relevant laws and regulations in making and retaining tape recordings. Counterparties and clients should be informed in advance that conversations are taped.
- 8.3 Procedures should be established to ensure a proper handling of tape recordings to ensure their security, integrity and confidentiality. The retention period should be determined having regard to the nature of the transactions. For longer term instruments such as interest rate swaps and forward rate agreements, differences may surface only when the first movement of funds is to take place. It is therefore advisable that records for such deals be retained for a long enough period. In general, tape recordings for all transactions should be kept for at least two months.

9. After-hours or off-premises dealing

- 9.1 After-hour or off-premises dealing may entail additional operational risks, and hence should be closely monitored and controlled.
- 9.2 Such dealing activity should only be conducted by staff members who have proper approval and authorization from management. Management should specify the kinds of deals that are permitted and the limits imposed. In no circumstances should such after-hour or off-premises dealing be used to circumvent trading limits imposed on staff members.
- 9.3 Clear guidelines should be laid down on the reporting and recording of such deals. These should include, among other things, a requirement on the trader committing an off-premises trade to immediately communicate back to the office to record the time and other details of the deal.
- 9.4 To facilitate the monitoring and valuation of day-end positions, it is recommended that each institution set a time for close of business.
- 9.5 Prices of deals executed outside normal trading hours are generally not included in the official trading ranges promulgated by recognized market sources.

10. Use of mobile phones for transaction business

- 10.1 Transactions in the trading room should be time-stamped, and tape recorded (for telephone deals). The use of mobile phones and similar devices that do not support retrieval of relevant transaction records in the dealing room should be prohibited.
- 10.2 Where the use of such devices is allowed on an exceptional basis, management should have in place a written policy which specifies the circumstances under which such use may be approved by management.

11. Stop-loss orders

- 11.1 Before a stop-loss order is placed and accepted, the counterparties involved should have a clear understanding of its terms and conditions, which should be explicitly spelt out and documented. Those terms and conditions may include the following:
 - (a) The period during which the order is valid;
 - (b) Circumstances that trigger the order;
 - (c) Discretion, if any, in shelving the execution of the order, and circumstances that allow the exercise of such discretion; and
 - (d) The liability of the counterparty accepting the order in case of a slippage in execution.
- 11.2 An institution accepting a stop-loss order should be fully aware of its responsibility and liability, and execute the order promptly once the trigger level is reached. However, unless prior agreement has been made between the counterparties, there is no guarantee that the order will be executed at a pre-determined price/rate, as fast moving market conditions may render this impracticable.
- 11.3 There should be close communication between the counterparties, especially at times of volatile or unusual market movements.

- 11.4 An institution placing a stop-loss order through an electronic platform that automatically triggers the order should exercise great caution, and should be fully aware of the possible implications.
- 11.5 In the event of a dispute on whether the trigger level has or has not been met, reputable market sources on trading ranges generally recognized by traders should be used as reference. Reliance on any one single source is inappropriate.

12. Approval of money brokers

- 12.1 An institution should formulate and document its approval policy (including its credit assessment criteria) with respect to the appointment of money brokers. In addition to capital adequacy and the reputation of the broking firm, management should take into consideration the requirements under prevention of money laundering and counter terrorist financing as set out in Chapter IV, section 1.
- 12.2 Dealers should not use a broking firm that has not been approved by management.

13. Role of money brokers

- 13.1 Money brokers serve as intermediaries of deals by matching counterparties on mutually acceptable terms and passing names to enable the conclusion of transactions. They should be strictly forbidden to act as a principal in a deal. Neither should they act in any discretionary fund management capacity.
- 13.2 Money brokers should act in the best interest of their clients, and should follow their instructions in each transaction.
- 13.3 Money brokers should exercise care in giving advice or passing information to principals, and should refrain from divulging confidential or sensitive information about activities of individual clients. Nor should they give an opinion which they are not qualified to make, or which falls outside their scope of responsibility (such as assessing the counterparty's credit).

14. Disclosure of names by money brokers

- 14.1 A money broker should disclose the name of a client only when the latter has serious intention to trade at the quoted price. Names should be provided one at a time. It is only when the first name is rejected that the second name should be put forward.
- 14.2 As much as practicable, principals are encouraged to provide money brokers with early indications on the types of counterparties or particular names that are not acceptable. They may specify the types of instruments or maturities in which they would not wish to deal with certain counterparties.
- 14.3 Principals may also provide indications on differences in prices/rates, if any, in relation to different types of counterparties.
- 14.4 Where the money broker is acting for a client which is a non-regulated entity, such as a corporate client, he/she should disclose this information. A principal may require that the particular name be disclosed before a firm quote is made. Documentation may also need to be reviewed because of credit or other considerations.
- 14.5 Both the lender and the borrower have the right to reject a counterparty's name. Should this happen, it is recommended that the rejection be communicated to the money broker in a timely manner. In the event that a lender is rejected, confirmation from a member of senior management of the borrowing institution should be provided.
- 14.6 When a borrower's or a lender's name is rejected, raising suspicions on the existence of a counterparty at the price quoted by the money broker, the money broker should seek cooperation from the client to disclose the latter's name. In the unlikely event that the client disagrees, the money broker or the party who intends to deal may seek the assistance of the Markets Practices Committee of TMA in ascertaining the authenticity of the quotation.

15. Deals arranged through money brokers

15.1 Where a quote is placed with more than one money broker, a dealer should agree with them the minimum deal size for each in the event that the quote is hit simultaneously.

- 15.2 If a quote is hit by more than one party at the same time, the money broker should split the amount equally among the various parties to ensure fairness.
- 15.3 Where a dealer hits a quote for an amount larger than the minimum size and the money broker can honour the full amount, the dealer should accept split amounts. He/She should not insist that the deal be executed in full size with a single counterparty.
- 15.4 Where a dealer is making an attempt to accommodate the full amount requested by the counterparty, which is larger than the normal market size, he/she should indicate to the money broker the minimum amount that can be done. The money broker should not be held responsible for the balance of the quotation. In a rapidly moving market, the counterparty may decide not to wait, and fill up the balance elsewhere.
- 15.5 Where a deal arranged through a money broker has to be declined in full or in part because of credit reasons, the money broker should make efforts to arrange name switching or take other appropriate actions as agreed with the client. The money broker should be allowed to quote 'choice price' for that particular price/rate for a reasonable period of time, for the full amount or for the balance of the original quotation, as the case may be.
- 15.6 A money broker who has duly performed his/her duties should not be held responsible for the failure in deal execution due to credit reasons.
- 15.7 If a lender discovers after closing the deal that the limit to the borrower has been exceeded, senior management of the lending institution should immediately notify the money broker and the borrower. The lender and the money broker should make their best efforts to find a new lender to take over the transaction, and the original lender should be responsible for any cost incurred in the replacement exercise. The borrower should not insist on the original lender if an acceptable replacement can be found. If a substitute lender cannot be found, the original lender must honour the deal.
- 15.8 It is unethical for a principal to deal in a minimum amount through a money broker for the sake of ascertaining the name of the counterparty, with a view to, for example, establishing direct dealing.

16. Commission and brokerage

- 16.1 Money brokers should agree with the principals the brokerage charge and the way the charge is presented. Negotiation of brokerage should be conducted by senior management of an institution.
- 16.2 It is a common practice for money brokers to quote dealing prices/rates net of brokerage charge. In some derivatives markets, however, with the explicit agreement of all the parties concerned, a money broker may quote prices/rates that include commission and brokerage. If the latter is not separately identified and presented, the money broker or the principal has a responsibility to inform the client and keep a record of how the price/rate is to be broken down into payments to counterparties and upfront commission. There should be a clear understanding among the parties involved that this breakdown will be determined before the deal is executed.
- 16.3 Brokerage is usually payable not later than the end of the following month. It is the obligation of the principals to pay the charges promptly.
- 16.4 The invoices presented by the money broker should be expressed in the currency of the deal. Where appropriate, brokerage charge that has been converted into a currency agreed with the client will also be presented in an invoice.

17. Electronic broking

- 17.1 Management should be aware of the operational risks in using an electronic broking platform, such as the possibility of off-market trades. They should familiarize their dealing staff with such risks and put in place adequate controls restricting the access to such platforms to authorized staff members.
- 17.2 Dealers should exercise great caution in inputting their quotes, particularly in cases when prices/rates placed on the electronic platform can be dealt directly without reconfirmation of prices.
- 17.3 For most products (particularly derivatives products), it is recommended that an agreement be made between money brokers and principals that allows indicative prices/rates to be placed on the system. Reconfirmation of prices/rates would then be required before a deal is struck.

17.4 Guidelines should be stipulated on the time limit for the validity of the quotes. In markets where prices are fast moving, frequent reconfirmation should be required. A market participant is not obliged to honour a counterparty if an off-market price is hit without reconfirmation.

18. Market disruption / unforeseen bank holidays

- 18.1 When unforeseen events disrupt market activities, crippling normal trading and settlement, it is imperative for market participants to uphold a high level of professional and ethical standards. Negotiations between market participants should be carried out in good faith, and decisions made by personnel with proper authority. "Cherry picking" in closing out outstanding transactions should be avoided.
- 18.2 Where practicable, market participants should maintain close liaison with their counterparties, money brokers, settlement and paying agents, clients and regulatory authorities (including, but may not be limited to, the HKMA). Where possible, communication during a market disruption should be tape-recorded or set out in writing in a timely manner.
- 18.3 Market participants should make their best efforts to co-operate with the regulatory authorities. They should be alert to, and comply with, any new policies or guidelines issued by the HKMA (which are applicable to Als) and other relevant authorities on handling the market disruption. They are also encouraged to participate actively in the discussion of relevant industry associations which is aimed at formulating good practice in dealing with the disruption.
- 18.4 While regulatory authorities may provide recommendations to facilitate an orderly resolution of affected transactions, it remains largely the responsibility of the contracting parties to negotiate bilaterally for a resolution in accordance with the terms of the contract.
- 18.5 As much as practicable, market participants are advised to provide for contingent measures for the handling of unusual events in their contracts. This may include, for example, a fall-back mechanism (possibly involving the appointment of a calculation agent) for determining the exchange rate/interest rate in the event that the specified reference rates cannot be obtained. Settlement of transactions during a market disruption should preferably be governed by terms already set out in the contract (possibly a master document).

- 18.6 Unilateral suspension of settlement should be avoided if this may entail credit or even systemic risk.
- 18.7 Market participants should follow the instructions of the HKMA if settlement of Hong Kong dollars is disrupted.
- 18.8 For disruptions due to typhoons or rainstorms, market participants should follow the Typhoon and Rainstorm Guidelines issued by the Hong Kong Association of Banks (HKAB), which are promulgated on the HKAB website (http://www.hkab.org.hk/index.jsp).
- 18.9 If an unforeseen bank holiday is declared, making it impossible to settle transactions on a scheduled date, it is recommended that the contract be extended to the next business day, unless the bilateral agreement between the contracting parties has provided for alternative arrangements. No adjustment will be made to the price/rate as a result of the unintended contract extension, unless the parties concerned have agreed on other arrangements in their contracts.

19. Contingency planning

- 19.1 An institution should formulate a contingency plan to ensure business continuity in the front, middle/ back offices in the event of a market disruption or crisis. A high level of preparedness enhances the ability of an institution to weather shocks, and helps contain further disturbance to the market.
- 19.2 Once the contingency plan is set up, it should be subject to periodic review. Drills should be organized from time to time to familiarize management and staff with the arrangements under a contingent situation.

20. Internet and electronic trading

- 20.1 An institution should have a clear understanding of the potential risks involved in internet and electronic trading, and put in place effective controls to manage such risks.
- 20.2 Institutions that offer trading through the internet should satisfy themselves of the security of the system. They should notify their counterparties and clients immediately should they identify any threat or breach of security.

- 20.3 In planning for possible disruptions to the electronic platform, there should be a written agreement between the owner and the users of such platform, setting out the procedures and the allocation of risks in the event of a disruption.
- 20.4 For institutions that rely on outside support to operate and maintain their IT systems and/or e-trading platforms, due diligence should be regularly performed to evaluate the financial soundness of the outside service providers and their technical capability in maintaining an adequate level of security amid rapidly changing technologies. Als should have regard to the controls specified in the HKMA guidelines and circulars on management of technology outsourcing.

21. Mistrade and disputes

- 21.1 Compliance with this Code should help reduce misunderstanding and disputes. When differences or disputes arise, the parties concerned are strongly advised to come up with an early resolution. Personnel with appropriate decision making authority should be involved at an early stage.
- 21.2 Where an open or unmatched position occurs due to discrepancies in the amount, currency, value day or other trade details, it is recommended that one of the parties should take immediate action to neutralize the position in order to prevent further loss. This should not, however, be construed as an admission of liability by that party. Close communication between parties and proper documentation are recommended.
- 21.3 Where a wrong payment has been made, all the parties concerned should make efforts to resolve the matter expeditiously and satisfactorily. The party which erroneously receives the funds should not seek to benefit from retaining the money.
- 21.4 Where a money broker makes a firm, unqualified quote but is unable to substantiate it when a deal is proposed, the dealer has the right to require the money broker to 'stick' to the quote. The money broker has to compensate the dealer for the difference between the quoted price/rate and the executed price/rate. It is not practicable for the dealer to insist on trading with a particular name at the price/rate originally quoted (see also Chapter VII, section 6). The difference should be settled by cheque, or with mutual agreement, offset against brokerage charges. Settlement by a points system is not recommended, as tracking is difficult in the absence of a clear audit trail. For risk control purpose, the broking firm should keep a record of this kind of incident.

21.5 If the parties concerned fail in their attempts to settle the dispute, they may bring it to the TMA, which provides a dispute resolution service as mentioned in Chapter IV, section 6.3.

22. Misinformation and rumours

22.1 Market participants should exercise careful judgment in assessing whether the information they receive is accurate and can be substantiated. They should refrain from passing on misleading information or unfounded market rumours, which may disrupt market order or cause damage to an innocent party.

23. Code of Conduct for Benchmark Submitters

23.1 All Als which are submitting rates for benchmark fixings, including HKAB's HKD Interest Settlement Rate (commonly known as the Hong Kong Interbank Offered Rate or HKD HIBOR), the TMA's CNH⁷ Hong Kong Interbank Offered Rate and fixings of other types which may be specified by the HKMA in the future, should comply with the Code of Conduct for Benchmark Submitters stipulated by the HKMA⁸.

⁷ CNH denotes offshore Renminbi settled in Hong Kong.

⁸ See module CG-7 of the Supervisory Policy Manual issued by the HKMA.

VI. Risk Management Principles

Effective risk management starts with identification and understanding of the various types of risks. It involves the establishment of risk limits, monitoring mechanisms, and the adoption of risk mitigating and other prudent practices.

1. Risk management framework

- 1.1 Prudent risk management helps protect an institution from excessive exposure to losses and enhances its ability to weather shocks. An effective risk management framework should comprise, but is not limited to, the following components:
 - (a) A comprehensive and well documented strategy for risk identification, measurement, aggregation and monitoring across the entire institution;
 - (b) Effective oversight by the Board of Directors and senior management;
 - (c) Implementation of proper controls on risk taking and prudent setting of risk tolerances by management;
 - (d) Clear communication of risk management policies and controls within the institution to promote awareness and ensure compliance;
 - (e) Strong information systems and adequate manpower resources for effective monitoring and timely reporting;
 - (f) Segregation of risk management functions from risk taking and operational units;
 - (g) Clear assignment of responsibilities and delegation of authority for various risk management functions; and
 - (h) Rigorous and prudent risk assessment and approval processes for new products, services, and procedures.
- 1.2 Other essential components of a broad risk management strategy include, for example, proper remuneration systems which are consistent with and promote effective risk management, sound accounting policies and practices (encompassing prudent and consistent valuation methods and procedures). Accounting policies and standards should be consistently applied across all financial products. Periodic independent reviews of risk controls are recommended.

2. Types of risks

- 2.1 Market participants should be aware of various types of risks in treasury market transactions, including, but not limited to, the following:
 - (a) Strategic risk It means the risk of current or prospective impact on an institution's earnings, capital, reputation or standing arising from changes in the environment the institution operates in and from adverse strategic decisions, improper implementation of decisions, or lack of responsiveness to industry, economic or technological changes.
 - (b) Market risk Possible losses may arise from adverse movements in market rates or prices.
 - (c) Interest rate risk It refers to the risk to an institution's financial conditions resulting from adverse movements in interest rates.
 - (d) Credit risk A counterparty to a transaction may default before the final settlement of the transaction's cash flow. Even if a counterparty does not default, an increase of its perceived credit risk may result in a substantial increase of embedded credit default spreads, leading to substantial mark-to-market losses.⁹
 - (e) Settlement risk It refers to the risk of loss due to the counterparty's failure to perform its obligation after an institution has fulfilled its obligation under a contract (through either an advance of funds or securities) at the settlement date.
 - (f) Liquidity risk This is the risk that an institution may be unable to meet its obligations as they fall due. This may be caused by 'market liquidity risk' where an institution cannot easily unwind or offset specific exposures without lowering market prices significantly because of inadequate market depth or market disruptions. It may also be caused by 'funding liquidity risk' when an institution is unable to meet efficiently both expected and unexpected current and future cash flow and collateral needs without affecting its daily operations or financial condition.
 - (g) Operational risk It refers to the risk of direct or indirect loss resulting from inadequate or failed internal processes, systems and controls, error made by staff, management failure, or from external events.
 - (h) Legal risk This is the risk relating to the legal and regulatory aspects of treasury market transactions. Unenforceable contracts, lawsuits or adverse judgments may have a negative impact on the operations, financial conditions and/or reputation of an institution.
 - (i) Reputational risk Negative publicity regarding an institution's products or business practices, whether true or not, may adversely affect its customer base and revenue, or lead to costly litigation.

⁹ Some market participants consider the potential mark-to-market losses as 'market risk' rather than 'credit risk'.

- (j) Systemic risk The failure on the part of one market participant to meet its required obligations may result in cascading failures among other participants, crippling the functioning of the entire market.
- 2.2 Other than the specific risks identified above, market participants should be alert to fraud and other general business risks. Adequate controls have to be set up to ensure proper accounting of transactions.

3. Techniques for risk measurement

- 3.1 In relation to market risk, market participants generally adopt one or a combination of the following techniques for risk measurement:
 - (a) Nominal measure (also known as the "notional measure") Under this measure, risk exposure is assessed by the nominal value of the financial instruments being held.
 - (b) Factor sensitivity measure It estimates the sensitivity of an instrument or portfolio to changes in the market factors that affect their value (e.g. market prices and volatilities).
 - (c) Optionality measure It estimates the sensitivity of an option's value to changes in the prices or volatility of the underlying instruments. Delta, vega, theta, and rho measure the expected change in an option's price for a unit change in the price, volatility, time to expiration and interest rates of the underlying instrument, respectively. Gamma measures the sensitivity of delta to a unit change in the price of the underlying instrument.
 - (d) Stress testing It attempts to ascertain the possible value of positions or portfolios, capital adequacy and liquidity positions under exceptional conditions. For the test to yield reliable results, the assumptions used should mirror changes in market conditions as much as possible. Stress testing should be conducted on a firm-wide basis to highlight common exposures faced by different business units which could hit an institution at the same time.
 - (e) Scenario simulation It assesses the probable market value of an instrument or portfolio under different market conditions and/or risk factors.
- 3.2 In relation to counterparty credit risk, it has two components, namely pre-settlement risk (i.e. the risk of counterparty default during the life of a contract) and settlement risk (see 2.1(e) above)¹⁰.

¹⁰ For certain types of exposure, such as settlement of transactions that involve exchanges of principal, there is a possibility of losing the principal when an institution has honoured its payment obligation for one currency but its counterparty defaults before making delivery of the other currency. In those cases, settlement risk should be recognized and managed accordingly.

- 3.3 Pre-settlement risk is usually measured by the sum of a positive mark-to-market value (i.e. the replacement cost) and the estimated potential exposure. The latter refers to the risk of a possible change in the replacement cost over the life of a contract resulting from changes in market conditions. It is primarily a function of the remaining time to maturity and the expected volatility of the price, rate or index underlying the contract. Estimation of potential exposure may require the use of internal models.
- 3.4 In view of possible linkages and interaction among different types of risks, such as market risk and credit risk, an institution is recommended to adopt an integrated approach to identify and measure risks, having regard to the correlations among those risks.
- 3.5 An institution should revisit its risk assessment methodologies from time to time to ensure that the complexity of its approach is commensurate with the profile, nature and level of risks it takes, and is consistent with changes, if any, in those factors. Likewise, the assumptions adopted in risk assessment should be subject to periodic reviews.
- 3.6 Market participants should also be aware that the validity of assumptions may change rapidly under turbulent market conditions. Actual risks may be higher than measured risks.

4. Risk management limits

4.1 An important part of risk control is to establish exposure limits to the various types of risks identified. Examples of such limits are listed in the table below:

Type of limits	Purposes			
(a) In relation to mark	ret risk ¹¹			
Value-at-risk (VaR) limits	They are set in relation to VaR, a technique that makes use of statistical models to assess the probable loss under different scenarios within a certain level of confidence.			
Stop loss limits	They are established to avoid accumulated unrealized loss from exceeding a specified level within a specific timeframe (a day, a week, or a month etc.)			
Open position limits (gross/net)	A gross limit restricts the gross size of a long or short position, while a net limit takes into account legally enforceable offset of some positions.			
Maturity gap limits	Gap limits for each maturity band (e.g. 3 months, 6 months, 9 months, or one year, etc.) are established to avoid a concentration of maturities in certain maturity bands, which may potentially lead to losses when the yield curve exhibits non-parallel shifts.			
Liquidity limits	They are set to limit exposure that may arise when a decline in market activities amid unfavourable market conditions			

 $^{^{\}rm 11}$ This includes the market risk of credit products.

-

Type of limits	Purposes		
	adversely affects the ability of an institution to hedge, finance, or offset its position.		
Option limits	They are designed to control the risks of options. They should include delta, gamma, vega, theta and rho limits (see 3.1 (c) above). A set of matrix-based limits are usually adopted to better capture the potential aggregate NPV swings under different scenarios.		
Other limits	Limits may be set to capture various basis risks, such as cross currency swap basis and swap spread basis. Stress-test limits are used for capturing potential jump risks that may occur in a volatile market.		
(b) In relation to counterparty credit risk			
Aggregate counterparty limits	They are established to limit aggregate credit exposure to a single counterparty. Credit exposures to the counterparty are consolidated across all business lines, with allowance for legally enforceable netting and collateral arrangements.		

- 4.2 A proper and well-documented approval process should be established for the setting of risk limits. An efficient alert system should be built in to alert management when the limits are reached. Actions to be taken, including the authority and the procedures for approving limit excesses, etc. should be clearly laid down. The possible disciplinary actions for intended and repeated limit breaches should also be specified. Should intended and repeated breaches occur, management should carry out investigations and take disciplinary actions in accordance with the established policies and procedures.
- 4.3 The Board of Directors makes strategic decisions on the risk appetite of an institution, taking into consideration the linkage between risk limits and capital usage. In performing its role in this regard, the Board should comply with the relevant regulations and guidelines issued by the HKMA (applicable to AIs) and other regulatory authorities. ¹²

-

¹² See, for example module IC-1 of the Supervisory Policy Manual issued by the HKMA.

5. Risk mitigation

- 5.1 An institution should apply appropriate credit risk mitigating measures or credit enhancements to control its exposure to counterparties. The major common credit risk mitigating measures include netting, collateral and margining arrangements.
- 5.2 Written policies, procedures and controls should be put in place for the use of credit mitigation techniques. Management should also ensure that adequate systems are in place to manage such activities. This includes, among other things, regular revaluation of collateral and other mitigation instruments. Als are required to comply with the requirements on credit risk management stipulated by the HKMA. ¹³ Non-AI financial institutions or members that are not supervised by any regulatory authorities are advised to use the HKMA supervisory guidelines as a reference in formulating their policies on credit risk mitigation.

6. Risk monitoring and reporting

- 6.1 Effective risk monitoring requires the following practices:
 - (a) Physical and functional segregation of the trading room and the back office, including a segregation of reporting lines;
 - (b) Well-documented operating procedures to ensure, among other things,
 - i) Proper deal capture transactions are properly captured such that risk positions can be compiled in an accurate and timely manner for monitoring purpose;
 - ii) Timely reconciliation of differences differences between the front-end system, risk management system, credit system, back-end system and accounting system, etc., are timely identified and followed up on; and
 - iii) Prompt rectification of limit excesses;
 - (c) An effective and efficient reporting mechanism, which spells out, among other things, the circumstances under which exceptional reports have to be made to senior management;
 - (d) Independent verification of prices, rates and yield curves used for risk management and accounting purposes;
 - (e) Review of exceptional deviations of income from expected levels, having regard to the risk budget of the institution;

¹³ See module CR-G-1 and CR-G-13 of the Supervisory Policy Manual issued by the HKMA.

- (f) Regular review of practices and procedures by internal auditors and periodic review by independent experts as and when appropriate; and
- (g) Compilation of sufficient information to facilitate regular assessment of the risk appetite by the Board and senior management.¹⁴

7. New products, services, and procedures

- 7.1 A proper approval process should be set up for the introduction of new products, services, and procedures. The relevant units within an institution, such as legal, compliance, accounting, independent risk management (for each and every risk type), operations, systems and internal audit, etc., should be involved in the new product approval process to ensure that all risks associated with the proposed new product are properly identified and addressed. Their assessment and justifications for approving or rejecting a new product proposal should be properly documented. They should also be required to sign off to indicate their consent and readiness before the launch of a new product. Post-launch review should be conducted and the review results should be communicated to all units involved in the new product approval process.¹⁵
- 7.2 A product control unit independent of business functions should be responsible for implementing the new product approval process. New products / services / procedures should be defined vigilantly and broadly. Material variations to existing products (e.g. changes in the type of counterparties, currency denomination, trading platform, rate fixing terms, collateral requirement, etc.) should be considered as new products.
- 7.3 Products that are intended to be traded on a purely back-to-back basis should also be subject to thorough assessment. This helps forestall potential reputation and legal risks to an institution due to a lack of explanation to clients regarding the risk characteristics of a financial product.
- 7.4 Products already approved but not launched for a specified period of time should be subject to the new product approval process again to ensure that new risks from changes in financial, economic, social or political landscapes are taken into account before their launch.

 $^{^{14}}$ In preparing the information, reference could be made to module IC-1 of the Supervisory Policy Manual issued by the HKMA

¹⁵ See module IC-1 of the Supervisory Policy Manual issued by the HKMA.

7.5	Sufficient training	should	be giv	en t	0	staff	to	prepare	them	for	the	launch	of	the	new
	products, services	or techr	nologie	s.											

7.6	The established policies and procedures should be regularly reviewed with a view to covering
	new developments.

VII. Back-Office Practice

Independent checking and confirmation of transactions by back office is a powerful defense against erroneous or even fraudulent trades. This chapter recommends prudent practice in handling confirmation, payment and settlement, as well as other major back office operations.

1. Confirmation procedures: oral deal checks

- 1.1 Oral deal checks (or call backs) help contracting parties identify and resolve discrepancies in transaction details, such as amounts and value dates. This comfort is particularly helpful in the following situations:
 - (a) Market conditions are fast moving. Any hiccups in trading and settlement may entail a material financial impact on the participants;
 - (b) Settlement periods of financial instruments are relatively short, limiting the time for correction of errors;
 - (c) Deals are negotiated and settled bilaterally, or where dealing is conducted through voice money brokers; and
 - (d) Counterparties are located in a different time zone, and a full confirmation cannot be completed promptly.
- 1.2 The frequency of verbal checks should be decided by the parties involved in the transactions, having regard to the trading frequency as well as the factors listed in 1.1 above.
- 1.3 If checking is not conducted on a deal by deal basis, it is recommended that there should at least be a check at the end of the trading day.
- 1.4 On completion of the check, both parties should acknowledge that the deal(s) have been agreed upon. Where differences are identified, they should be resolved expeditiously.
- 1.5 In the event of a dispute that entails an open risk for either counterparty, remedial action should be taken by immediately closing out the position. Regardless of how the dispute is eventually resolved, the contracting parties should take all reasonable steps to mitigate further losses.

2. Confirmation procedures: Written / Electronic Confirmation

- 2.1 Independent checking and verification of transaction details by the back office helps identify errors in instructions prior to deal settlement, and guard against fraudulent trades by unscrupulous traders. Written confirmations provide a useful audit trail to facilitate investigation in the event of a dispute. Confirmation of deals may be made through electronic messaging systems.
- 2.2 If a deal is arranged through a money broker, the money broker should promptly confirm the transaction with both counterparties, whose back office staff should be involved in checking the details.
- 2.3 The details to be included in the written/electronic confirmation vary among financial instruments, but should generally include the following:
 - (a) Dates: transaction date, value date, maturity date and other relevant dates;
 - (b) Means through which the transaction is conducted: by money broker, phone, dealing system, or other channels;
 - (c) Details of counterparty: name, location etc.;
 - (d) Nature of transaction: type and side of the deal;
 - (e) Terms of the deal: rate, amount, currency, etc.;
 - (f) Standard terms/conditions applicable: BBAIRS, ICOM, ISDA, FRABBA, etc.; and
 - (g) Payment and settlement instructions, and other important information.
- 2.4 Upon receipt of the confirmation, the contracting parties should make a prompt and thorough check. Deal verification should be conducted directly between the back offices of the two contracting parties. Back office staff should not accept confirmations that come from front office staff.
- 2.5 If errors / discrepancies are spotted, they should be immediately notified to the other party. A written amendment of the confirmation or a new one should be sent out by the initiator of the confirmation, and agreed with the counterparty. The reconfirmation should be handled by back office staff.

- 2.6 A lack of response on the part of a counterparty should not be construed as signaling agreement or acknowledging the discrepancies raised by the other counterparty. The initiator of the confirmation (or amendments) should chase for a response if it is not received in good time.
- 2.7 If a response is not received despite the reminder(s), the unconfirmed transaction should be brought to the attention of senior management, who would consider appropriate actions to mitigate the risks involved.
- 2.8 In respect of transactions conducted on multilateral trading and clearing platforms (such as trades executed / registered on multilateral automatic trading systems (ATS) and multilateral central clearing counterparties (CCP)), transactions are automatically matched and contracting parties are informed of discrepancies, if any. Transaction details are also automatically relayed to the back offices of the contracting parties. Provided that the users of those platforms are satisfied with the efficiency, security, independence and legal validity of the confirmation process, and that effective procedures are in place to resolve discrepancies, they may agree to waive the exchange of confirmations.

3. Deal amendment and cancellation

3.1 If a deal is amended or cancelled after it has been verified and confirmed, this should be promptly reported as an exception for management attention. Where warranted, investigation should be conducted by, say, referring to the tape records.

4. Deal capture, reconciliation, and escalation procedures

- 4.1 All transactions and relevant data should be captured into the systems of an institution in a timely manner to facilitate risk monitoring.
- 4.2 To ensure consistency between the institution's official books and dealers' records, there should be timely reconciliation of pertinent data, reports and systems.
- 4.3 Exceptions and irregularities identified, such as those arising in the confirmation, settlement or reconciliation processes, should be handled in accordance with established escalation, resolution and reporting procedures.

5. Payment / settlement instructions

- 5.1 To ensure smooth and efficient settlement, payment and settlement instructions should be provided to the counterparty in a timely manner. Details of the instructions should be thoroughly checked before they are relayed.
- 5.2 Counterparties with regular trading are advised to use standardized settlement instructions to provide greater clarity. Such instructions should be set up via authenticated Swift message or by an exchange of letters or other secure means to confirm the arrangement. The use of Swift broadcast is not recommended.
- 5.3 Any amendments in the payment and settlement instructions should be notified to the counterparty without delay. The new instructions should be relayed in writing to the counterparty, who will be required to acknowledge the receipt of such instructions.
- 5.4 For deals arranged through a money broker, the principals have to clarify in advance whether the money broker has the responsibility for passing the payment instructions. If money brokers do not assume this role, the principals themselves should exchange instructions promptly.
- 5.5 Where money brokers are responsible for passing payment instructions, principals have to make sure that any alterations to the original instructions are immediately notified to the money broker (and also to the counterparty where possible). A principal who fails to do so will have to bear the liability for the resultant costs and/or differences.
- 5.6 Money brokers responsible for passing payment instructions should take extreme care to ensure that the instructions are correctly and promptly conveyed to the principals. Where a money broker is aware of an error made in the instructions, he/she should immediately notify the principals.
- 5.7 The liability on the part of a money broker in mishandling payment and settlement instructions should be agreed with the principals in advance. In particular, the allocation of

48

¹⁶ If the instruction from a counterparty differs from the standing settlement instruction (i.e. the default settlement instruction), the back office of the institution should reconfirm the trade again with the counterparty to ensure the validity of the new instruction.

responsibility for errors that are not identified by the principals within a reasonable time should be specified.

5.8 Where a payment is instructed to be made to a third party (rather than the counterparty), management staff of the payment instructions issuer has to satisfy itself that adequate controls are in place to ensure the authenticity of the payment.

6. Settlement of Differences

- 6.1 If a difference arises due to mishandling of instructions, the parties involved should agree on the means to settle the difference. In the absence of such an agreement, the difference should be settled in cash.
- 6.2 In the event that a money broker misses a price, it should make an offer to close the transaction at the next best price (if the deal has not been withdrawn). The difference should be settled in cash. However, with mutual agreement, it may be offset against brokerage charge.
- 6.3 Management should establish and communicate to its staff the proper procedures for handling settlement differences. A dealer should not refuse to accept the settlement of difference in cash, and insist that the original deal be honoured. Should this happen, the money broker should bring the case to the attention of senior management, who would consider appropriate actions to resolve the issue.

7. Late Payment Penalties

7.1 When funds are not received on time, resulting in overdrawn accounts and overdraft penalties, the party responsible for the late payment should reimburse the recipient for such penalties.

VIII. Market Specific Dealing Practices and Conventions

This chapter highlights the dealing practices and market conventions in respective markets. The principles and practices stipulated in Chapter V, which are applicable across various products, will not be repeated here.

The information on market conventions is for **reference** only. Market participants should acquire a thorough understanding of detailed market practices before entering into a transaction.

1. Foreign exchange

1.1 Dealing procedures

- (a) The market convention is to quote a currency pair in terms of a bid-offer quotation, and the transaction amount in terms of millions of the base currency. For example, in respect of a USD/HKD transaction, the amount is expressed in terms of millions of US dollars.
- (b) 'Tiny size' generally refers to a transaction of under 1 million US Dollars, while 'small size' generally refers to a transaction of between 1 and 5 million US Dollars. Market conventions may, however, change over time, and market participants should acquaint themselves with the latest practice.

1.2 Value date and Maturity date

- (a) Foreign exchange quotations in the professional market are for value spot. Market consensus is to define the value date of spot transactions as two business days from the transaction date for most major currencies.
- (b) There are exceptions to the above practice. For instance, the value date of spot USD/CAD transactions is normally one business day after the transaction date. Market participants are advised to acquaint themselves with the market conventions of the specific currency markets in which they operate.
- (c) The maturity date of all USD/HKD FX Forwards shall be both a US and HK normal business day.
- (d) The maturity date of all USD/CNY(HK) FX Forwards shall be a Mainland China, HK and US normal business day.
- (e) Modified following business days shall apply for all USD/HKD or USD/CNY(HK) FX Forwards.

1.3 Rates

- (a) TMA publishes USD/HKD Spot Rate at around 11:30a.m. Hong Kong time each normal business day on the TMA website (http://www.tma.org.hk) and in Reuters page "HKDFIX".
- (b) TMA publishes USD/CNY(HK) Spot Rate at around 11:30a.m. Hong Kong time each normal business day on the TMA website (http://www.tma.org.hk) and in Reuters page "CNHFIX01".

2. Money market

2.1 Dealing Procedures

- (a) Prices are quoted in %, down to 0.1 basis point.
- (b) Unless otherwise specified, the deposit period is calculated on the basis of the actual number of calendar days.

2.2 Value date and Maturity date

- (a) In accordance with market convention, quotations for all HKD money market transactions, except the overnight tenor, are for value today at or before 11:00a.m. and for value tomorrow thereafter.
- (b) Quotations for all offshore Renminbi money market transactions, except the overnight tenor, are for value spot.
- (c) The maturity date of all deposits in either HKD or CNH shall be a HK normal business day.
- (d) Modified following business days shall apply for all HKD or CNH deposits.
- (e) Quotations for money market transactions denominated in other currencies should follow the relevant market conventions.

2.3 Rates

(a) HKAB publishes the Hong Kong dollar interbank interest rates in Reuters page "HKABHIBOR".

- (b) TMA publishes the CNH Hong Kong Interbank Offered Rates (CNH HIBOR) at 11:15a.m. Hong Kong time each normal business day on the TMA website (http://www.tma.org.hk) and in Reuters page "CNHHIBOR=".
- (c) TMA publishes the Hong Kong Dollar Overnight Index Average (HONIA) at around 5:00p.m. Hong Kong time each normal business day on the TMA website (http://www.tma.org.hk) and in Reuters page "HONIX".

2.4 Interest accrual basis

(a) In respect of Hong Kong dollar transactions, the market convention for the purpose of interest calculation is ACT/365. One year is deemed to comprise 365 days even in a leap year.

Examples:

i) in a leap year, the interest payable on maturity for a 3 month HKD deposit value 2 January and maturing 2 April is calculated as follows:

$$P \times r/100 \times 91/365 =$$

where r denotes the deposit rate

ii) in a leap year, the interest payable on maturity for a 1 year HKD deposit value 2 January and maturing 2 January the year after is calculated as follows:

```
P \times r/100 \times 366/365 =
```

where r denotes the deposit rate

- (b) In respect of offshore Renminbi transactions, the market convention for the purpose of interest calculations is ACT/360.
- (c) The day count basis for interest calculations in other currencies may differ. Market participants are advised to follow the market conventions in the respective markets.

3. Debt securities

3.1 Dealing procedures

Prices are usually quoted clean, excluding accrued interest. Yields are usually quoted on an annualized basis.

3.2 Value date

- (a) The commonly adopted value dates for secondary market transactions in the Hong Kong market (Hong Kong dollar and offshore Renminbi) are:
 - i) Hong Kong Exchange Fund Bills and Notes (EFB and EFN) the value date is the same as the trade date if a transaction is done at or before 11:00a.m. on the trade day. For a transaction done after 11:00a.m., the value date is the business day after the trade date.
 - ii) Hong Kong Government Bond (HKGB) the value date is the same as the trade date if a transaction is done at or before 11:00a.m. on the trade day. For a transaction done after 11:00a.m., the value date is the business day after the trade date.
 - iii) Corporate The value date is subject to mutual agreement, but is usually three business days after the trade date.
 - iv) Offshore Renminbi Bond The value date is subject to mutual agreement, but is usually three business days after the trade date.
- (b) The value dates for different debt products may vary. Market participants should have a full understanding of the market practice before entering into a transaction.

3.3 Indicative pricings/quotes:

- (a) Exchange Fund Bills and Notes Reuters page "0#HKEFBN=MIDF"
- (b) Hong Kong Government Bonds Reuters page "HKGB003"
- (c) Renminbi Bonds issued in Hong Kong by the Ministry of Finance of the People's Republic of China – TMA website (http://www.tma.org.hk) and Reuters page "0#RMBBQAM=TMAH"
- 3.4 Recommended settlement method To forestall settlement risk, market participants are strongly recommended to settle their transactions on a Delivery versus Payment (DvP) basis.

3.5 Interest accrual basis

- (a) The following accrual basis generally applies to the Hong Kong market (Hong Kong dollar and offshore Renminbi):
 - i) EFB and EFN Semi-annual ACT/365 Fixed, modified following business days with adjustment
 - ii) HKGB Semi-annual ACT/365 Fixed, modified following business days with adjustment
 - iii) Corporate ACT/365 Fixed, subject to mutual agreement, but usually modified following business days with adjustment

- iv) Offshore Renminbi Bond ACT/365 Fixed, modified following business days with adjustment
- (b) Market conventions on interest accrual basis vary among debt products. Market participants are advised to familiarize themselves with the practice in the relevant markets.

3.6 Reference on market practices

- (a) For Exchange Fund paper and Hong Kong Government Bond, market participants are advised to make reference to "The Information Memorandum of Exchange Fund Bills Programme" and "The Information Memorandum of Exchange Fund Notes Programme" issued by the HKMA and "The Information Memorandum of the Government Bond Programme Institutional Bond Issuance Programme" issued by the Hong Kong Government.
- (b) For international securities, market participants may wish to refer to "International Primary Market Association's (IPMA) Hand Book".

4. OTC derivatives

4.1 Dealing procedures

- (a) Market participants are strongly advised to enter into legally enforceable master netting agreements and credit support arrangements
- (b) In an option transaction, the following descriptions should be clearly stated:

	Currency (FX) options	Interest rate options
Option style (American or	V	$\sqrt{}$
European) Call or put	V	V
Strike price/yield		
Amount	V	V
Tenor	V	V
Expiration date and time	$\sqrt{}$	$\sqrt{}$
(and time zone)		
Fixing and settlement dates	$\sqrt{}$	$\sqrt{}$
and procedures		
Premium amount and	$\sqrt{}$	$\sqrt{}$
payment date		
Name of counterparty	$\sqrt{}$	$\sqrt{}$
Whether a delta hedge is	$\sqrt{}$	$\sqrt{}$
simultaneously entered into		
(if yes, % of hedge and exact		
price/yield for the hedge to		
occur)		

Cap or floor	Applicable to interest rate
	caps and floors
Roll frequency	Applicable to interest rate
	caps and floors
Underlying instruments	Applicable to bond options
	and swaptions (tenor of
	underlying swap to be
	stated)
Physical or cash settlement	Applicable to bond options
	and swaptions

(c) In relation to forward rate agreements, interest rate swaps and cross currency swaps, the following terms should be expressly stated:

	Forward rate agreements / Interest rate swaps	Cross currency swaps
All financial terms	$\sqrt{}$	$\sqrt{}$
Notional amount	$\sqrt{}$	
Tenor	$\sqrt{}$	$\sqrt{}$
First fixing rate, if	$\sqrt{}$	$\sqrt{}$
necessary		
Anniversary / Roll date	$\sqrt{}$	
Settlement date	$\sqrt{}$	$\sqrt{}$
Relevant calendar to	$\sqrt{}$	(and also relevant
calculate the swap		calendar used for
schedule		both/each leg)
Which side of the swap	Applicable to interest rate	$\sqrt{}$
(pay fixed, receive floating	swaps	
or vice versa)		
Maturity and date	Applicable to interest rate	$\sqrt{}$
matching requirements	swaps	
Foreign exchange		$\sqrt{}$
reference rate		
Any initial and/or final		$\sqrt{}$
exchange of principal		
Any need for "mark to		$\sqrt{}$
market" exchange of		
notional principal on roll		
dates		

- (d) In addition to the lists in (b) and (c), all other relevant terms, especially those that vary from standard market practice, should be clearly stated in a transaction.
- (e) In relation to options transactions, prices are quoted either in terms of premium (expressed as an upfront percentage) or volatility (expressed as a percentage per annum). Market participants should clearly indicate the method of quotation. They should satisfy themselves that the premium accurately reflects the agreed volatility and market conditions at the time of the deal.

- (f) As regards non-deliverable forwards, prices are generally quoted in terms of outright forward, or spot fx and swap pips.
- 4.2 Value date Market conventions for Hong Kong dollar and offshore Renminbi OTC derivatives products are as follows:

	HKD products	Offshore Renminbi products			
Currency (FX) options	T+2				
Interest rate options Interest rate swaps	T at or before 11a.m.; T + 1 after 11a.m.	T + 2			
Forward rate agreements					
Cross currency swaps	T + 2				
Non-deliverable forwards	Not applicable	T + 2			

4.3 Rates – Market participants are advised to familiarize themselves with the calculation conventions and the reference rates for the relevant products. Examples of information sources on fixings are listed below for reference:

Rates	Reuters Page
USD/CNY(HK)	CNHFIX01
USD/HKD	HKDFIX
CNH HIBOR	CNHHIBOR=
HKD HIBOR	HKABHIBOR
SOFR	USDSOFR=
HONIA	HONIX
RMB General Collateral Repo	CNREPOFIX=CFXS
RMB Shibor NDIRS	Shibor
RMB Depo NDIRS	PBOCB

4.4 Recommended settlement method

	HKD products	Offshore Renminbi products
Currency (FX) options	Continuous Linked Settlement	For non-deliverable (ND)
	(CLS)	USD/CNY option:
		Cash settlement in USD
		USD/CNY(HK) option:
		Cash settlement in CNY(HK)
		or USD or physical
		settlement
Interest rate options	Physical settlement for	Physical settlement for
	swaption;	swaption;
	cash settlement for cap and	cash settlement for cap and
	floor in HKD	floor CNY(HK)
Forward rate agreements / Interest rate swaps	Net settlement in HKD	Net settlement in CNY(HK)
Cross currency swaps (CCS)	Cash settlement in HKD and	Cash settlement in CNY(HK)
	USD	and USD
FX Forwards	CLS	Cash settlement in CNY(HK)
		and USD
Non-deliverable (ND)	Not applicable	For non-deliverable (ND)
forwards & IRS		products:
		Net settlement in USD using
		SAEC page

4.5 Interest accrual basis

	HKD products	Offshore Renminbi products
Interest rate options	HIBOR IRS:	REPO ND-IRS:
Forward rate agreements / Interest rate swaps	Quarterly fixed ACT/365F vs Quarterly 3M HIBOR ACT/365F	Quarterly fixed ACT/365F vs Quarterly 7D REPO ACT/365F
	HONIA OIS: Annually fixed ACT/365F vs Daily compounding HONIA in arrears or Quarterly fixed ACT/365F vs Daily compounding HONIA in arrears modified following business days	SHIBOR ND-IRS: Quarterly fixed ACT/365F vs Quarterly 3M SHIBOR ACT/360 DEPO ND-IRS: Annually fixed ACT/365F vs Annually 1Y DEPO ACT/360 HIBOR IRS: Quarterly fixed ACT/360 vs Quarterly 3M HIBOR ACT/360 Modified following business days for all ND-IRS and IRS products
Cross currency swaps (CCS)	See above for HKD leg. For USD leg, quarterly ACT/360, modified following business days	ND-CCS: CNY leg semi-annually fixed ACT/365F vs USD leg semi-annually 6M LIBOR ACT/360 CCS: CNH(HK) leg quarterly fixed ACT/360 vs USD leg quarterly 3M LIBOR ACT/360 The maturity date of all ND-CCS and CCS products shall be a Mainland China, HK and US normal business day Modified following business days for all ND-CCS and CCS products



TMA Office

Room 602, 6/F, China Building 29 Queen's Road Central, Hong Kong Tel: (852) 2543 7668

Fax: (852) 2815 9931 Email: tma@tma.org.hk

TMA Secretariat

55/F, Two International Finance Centre 8 Finance Street, Central, Hong Kong Tel: (852) 2815 9920

Fax: (852) 2815 9931 Email: tma@tma.org.hk