FINAL REPORT

BEST PRACTICES STANDARDS
ON
ANTI MARKET TIMING AND ASSOCIATED ISSUES FOR CIS

TECHNICAL COMMITTEE
OF THE
INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS

OCTOBER 2005

I. INTRODUCTION

1. During its 31 January and 1 February 2005 meeting the Technical Committee approved the public release of the consultation report entitled *Best Practices Standards on Anti Market Timing and Associated Issues for CIS* (Consultation Report). The Consultation Report was revised and finalized after consideration of all the comments received from the international financial community as a result of a public consultation process. A feedback statement summarizing and discussing all the public comments received is presented in an Appendix, which can be found at the end of this report. The Technical Committee approved the present final version of *Best Practices Standards on Anti Market Timing and Associated Issues for CIS* and authorized its public release during its 2 and 3 October 2005 meeting.

2. In May 2004 the IOSCO Technical Committee had given to its Standing Committee on Investment Management (SC5) a mandate on market timing and associated issues in connection with collective investment schemes (CIS). The purpose of this mandate was to examine whether, and if so what, steps are taken by different regulators to address issues arising from market timing. This information was to be used to develop international best practice standards in this area, by identifying what regulators should seek to achieve when dealing with the issues raised by market timing.

3. The Mandate called for the following intended outputs:

(a) a questionnaire/survey for each regulator to complete in respect of different regulatory approaches to, and scope of, market timing;

(b) a report consolidating and concluding on the results of the members' survey; and

(c) from information derived from (b) a discussion paper:

- (i) acknowledging the detrimental effects that can arise for continuing investors from market timing and the key issues raised by market timing for regulators;
- (ii) presenting best practice standards by identifying what regulators should seek to achieve when dealing with the issues raised by market timing in connection with CIS.

4. This report generally describes market timing and its associated issues, and their detrimental effects on CIS and their investors. It then identifies best practice standards related to CIS and market timing. Those standards address the tools that are available to CIS operators to deter detrimental market timing of CIS shares, as well as the obligations of CIS operators to employ those tools.

5. The term "market timing" has been used specifically to refer to instances where arbitrageurs have looked to take advantage of out of date or stale prices for portfolio securities that impact the calculation of a CIS's net asset value (NAV) or, where investors have bought units only to redeem them within a few days in order to exploit inefficiencies in the way CIS set their NAV. Taking advantage of this kind of short-term arbitrage repeatedly in a single CIS is called "timing" the CIS.

6. Market timing can also occur because CIS often calculate their NAV by using the closing prices of portfolio securities on the exchange or market on which the securities principally trade. Many foreign markets, in which a CIS may be invested however, operate at times that do not coincide with those of major domestic markets. For example, Asian markets generally operate during the evening in the United States and close before the opening of the major U.S. markets. Similarly, an UK CIS invested in securities that principally trade in the United States would price at 12.00 GMT using prices from the previous U.S. market close (i.e. 21.30 GMT the previous day). As a result the closing prices of securities that principally trade on the foreign exchanges or markets may be as much as 12 to 15 hours old when used by a CIS to calculate NAV. These prices may not therefore reflect market value at the CIS's NAV calculation if an event affecting the value of those securities has occurred since the closing prices were established on the foreign market but before the CIS's valuation point.

7. In such circumstances, some investors can use this information advantageously to buy or redeem units. This is known as time zone arbitrage and can arise whether investors subscribe to buy or to redeem units on the more common forward (unknown) price basis, or at a historic (known) price basis.[1]

8. Market timers are able to exploit stale prices by (i) purchasing CIS units at inappropriately low prices, and (ii) redeeming CIS units at inappropriately high prices, both of which dilute the interests of the remaining investors. Both activities dilute the return to buy-and- hold investors and so act to their detriment. This goes against two key principles on which national regulators are agreed. Specifically, that CIS operators should be required to treat their investors fairly and to manage conflicts of interest.

9. Market timing also can occur when the closing prices for securities traded on domestic exchanges may not reflect their current market values as of the time that the CIS calculates its NAV. For example, the most recent transaction in a small cap security held by a CIS may have occurred early in the trading day, after which the overall market in securities in that sector increased or decreased, which would call into question whether, at the CIS's valuation point, the CIS could sell its security (or buy more of the security) in the market at that earlier price. Likewise, trading in a security could be quite thin on any given day, which would call into question whether the security could be traded in the market at that price at the CIS's valuation point.

10. Late trading is related and can exacerbate market timing problems. Market timing activities are not prohibited, but as noted they can have damaging effects on the interests of other investors in a CIS. Late trading, however, is and should be explicitly prohibited. Late trading involves the placing of orders to buy or redeem shares after the designated cut off point (the time at which CIS typically calculate their NAV) but receiving the price based on the NAV at the cut off point. It differs from market timing in that the trades are booked as if concluded before the cut off point, and necessarily involves collusion or agreement between the late trader, and the CIS operator and or financial intermediaries. This enables the trader to profit from events that have occurred after the cut off point but are not reflected in that day's price.

11. Where, in some jurisdictions, a CIS or certain designated persons (i.e. dealers in the CIS's shares, the principal underwriter of the CIS shares and persons designated in the CIS prospectus as authorized to consummate transactions in the CIS's shares) receive orders for the purchase or redemption of the CIS's shares before the time of the NAV calculation, those orders must be processed at a price based on that NAV, even if the orders are not transmitted to the CIS until after the NAV calculation time. Late trading can result if this is not controlled, for example, in the US the NAV calculation for most CIS's is, 4 p.m. ET. As the designated persons are permitted to

transmit the pre-4 p.m. orders to the CIS after 4 p.m, there is an opportunity for late trading by transmitting post-4-pm orders with pre-4pm orders.

12. Market timing and late trading can also occur when CIS operators or others provide non-public information about the portfolio securities of the CIS to selected investors. Market timers and late traders can use this non-public information to enhance their trading to the detriment of other CIS investors.

13. Short term trading of CIS units is a linked phenomenon. It is impossible for regulators to define short term trading in terms of a particular time frame. In considering the most appropriate time frame that may be suspicious CIS operators should consider a number of factors, for example, the number, size, nature and frequency of turnover, average holding period of CIS shares etc. Short term trading occurs where investors buy units and redeem them within a short period of time, usually a few days, either as part of a time zone arbitrage strategy or to gain exposure to a particular pool of assets for a short period of time. The underlying concern is that short term trading forces additional transaction costs on a CIS through the more frequent buying and selling of the CIS's underlying securities than the portfolio manager would have chosen to achieve the investment trading strategy and objectives of the CIS.

14. Short term trading, generally, is legal as regards the activities of the investors concerned. However, short term trading may harm the interests of long term investors who hold units in the CIS. CIS operators should not ignore the potential detrimental effects these strategies have on the CIS returns and their ability to manage effectively a portfolio of securities.

II. RELATIONSHIP BETWEEN THE IOSCO TECHNICAL COMMITTEE BEST PRACTICE STANDARDS ON ANTI MARKET TIMING AND ASSOCIATED ISSUES AND THE IOSCO OBJECTIVES AND PRINCIPLES OF SECURITES REGULATION

1. Of the four IOSCO principles relating to CIS, as set in the *IOSCO Objectives and Principles of Securities Regulation*, the two that are most relevant to the scope and purpose of this work are:

- the regulatory system should set standards for the licensing and the regulation of those who wish to market or operate a CIS; and

- regulation should ensure there is a proper and disclosed basis for asset valuation and the redemption of units in a CIS.

2. The terms of reference of SC5 are also clearly relevant to assess the scope and purpose of this work as they indicate that "*SC5 aims at developing a detailed set of principles for the proper regulation and supervision of the asset management industry globally considered, particularly concerning the establishment of robust governance for globally active investment funds*".

3. The above mentioned principles and the SC5 terms of reference guided the Technical Committee's work to assist CIS operators in determining the actions they need to take to ensure their investors are protected from the activities of market timers. As explained in this report, it is the responsibility of each operator to assess the risk to their investors and decide which of the described tools they wish to use.

III. BEST PRACTICE STANDARDS

The following best practice standards address the tools that are available to CIS operators to deter market timing of CIS, as well as the obligation of CIS operators to employ those tools. Regulators should seek to meet these standards when dealing with issues raised by market timing.

Standard 1: CIS operators should act in the best interest of CIS investors

1. Each CIS operator should demonstrate that it:

   (i) treats its investors fairly; one group of investors (such as market timers) should not be favored over others (for example long term investors); and

   (ii) manages conflicts of interest between itself and its investors and make full and fair disclosure to investors of policies to deal with conflicts.

2. CIS operators should build into their business strategies and operations the imperative of treating their investors fairly and for this to be reinforced by the actions and tone set at the top of the organization.

3. Conflicts of interest are inherent in the financial services business. CIS operators should address those practices that potentially sacrifice the interests of one set of investors in favor of the interests of another. In the case of market timing, the interests of traders who seek to take advantage of stale prices or short term price aberrations may conflict with interest of those investors who hold units in the CIS for the long term.

4. CIS operators themselves can also face a conflict of interest in connection with market timing. If the CIS operator is compensated on the basis of the CIS's net assets, the CIS operator benefits from market timing when additional assets are invested in the CIS resulting in more fees for the CIS operator. If the CIS operator is inclined to allow market timing, this can harm the CIS by increasing transaction costs and disrupting portfolio management. The CIS operator as a fiduciary must act in the best interests of the CIS, including minimizing transaction costs and discouraging activities that disrupt management of the CIS's portfolio. The CIS operator should therefore disclose to investors its policies for dealing with this conflict

Standard 2: CIS operators should ensure that their operations and disclosure in respect of market timing and late trading are consistent with Standard 1

4. CIS operators must analyze the harm created by market timing and late trading practices, and then take appropriate action to address the harm.

5. The specific "tools" used by the CIS operator to conduct the monitoring, detection and deterrence of market timing and late trading practices should not necessarily be mandated. The CIS operator should be free to customize the tools to ensure they are appropriate for its investors.

6. However, CIS operators should be required to have a compliance program in place to ensure their operations meet Standard 1, and they should be required to disclose their policies and procedures relating to market timing and late trading, fair valuation and disclosure of portfolio holdings.

7. Some of the processes that may be considered are processes to monitor/detect/ deter potential market timing /late trading activity

Market timing

8. CIS operators will be expected to identify the risks of market timing for each CIS:

(i) CIS operators should monitor trading patterns based on parameters such as deal number, size and frequency;

(ii) CIS operators should monitor the CIS assets to determine if they present opportunities for time zone arbitrage (e.g. the amount of foreign securities in the CIS);

(iii) CIS operators should take measures, based on the risks identified and likely impact on the CIS, to prevent market timing or ameliorate its detrimental effects;

(iv) CIS operators should monitor valuation methodologies to ensure that the CIS's NAV is accurate.

9. Market timing could lead to increased costs for the CIS and its continuing investors in a number of ways including:

(i) trading and custody costs, which contribute to a dilution of the CIS, thereby harming its profitability and its marketability;

(ii) cash management creating additional transactions costs;

(iii) investment strategy being drawn to focus on issues outside of the scope of investment management.

10. Any of these measures alone may not be sufficient to adequately monitor, detect and deter market timing if significant market timing opportunities exist, but some combination of these measures may be appropriate.

Late trading

11. The CIS operator should implement appropriate controls and checks to prevent late trading.

12. Controls should be in place that would expose any attempted late trading. Late trading should be banned to avoid any collusion by the operator or its agent with the investor which might enable the investor to take advantage of information not available at the valuation point in determining whether to deal and to benefit from the deal. Such collusion is fraudulent and undermines investor confidence in the market and goes against the principle of equitable treatment of investors.

13. The CIS operator should also carefully evaluate the risk of late trading within its intermediary arrangements relating to the transmission of purchase and redemption requests.

Portfolio Valuation

14. CIS operators should demonstrate that they have accurately valued their portfolios and their NAVs, and deal at prices that reflect those values.

15. The use of fair value is required in certain jurisdictions (e.g. the U.S.) whilst in others the use of fair value is allowed but is not mandatory (e.g. Canada). Some jurisdictions do not allow the use of fair value when closing prices are available.

16. CIS operators must fair value when required by local regulation and, should consider using fair value when permitted but not required by regulation. Fair value pricing may be particularly relevant for securities for which closing prices may be stale or may not reflect stock specific or general information that has become available after foreign markets close but before the CIS's valuation point. In making the decision to adopt fair value pricing, the CIS operator should weigh the benefits of using fair value pricing to reduce pricing discrepancies against the subjectivity involved in fair value pricing, as well as the detriment if the CIS does not fair value.

Agreements with Distributors

17. CIS operators may use third party distributors (who may not be regulated) to sell their shares. It is the CIS operator's responsibility to address detrimental market timing transactions that are identified. Whilst recognizing that formal agreements are not always in place with all distributors, where there are legally enforceable arrangements (for example between a CIS operator and a fund supermarket), the agreement should h set out the distributor's role, and its procedures to identify market timing or to allow the CIS operator the right to inspect the records of the distributor in respect of the identification and management of the risk of market timing.

18. Where distributors aggregate orders, operators should also take steps to deal with any potential problem caused by combining transactions for several investors, which may hide the activities of market timers. Whilst recognizing these difficulties, CIS operators must meet their obligations to their investors and satisfy themselves that potentially suspicious transactions are not effected on behalf of market timers.

Compliance Programs

19. CIS operators should be required to implement compliance programs that include written policies and procedures designed to monitor, detect and deter market timing and late trading. CIS operators should conduct regular reviews to assess the adequacy and effectiveness of their compliance programs, with a designated senior person responsible for this oversight.

20. Compliance programs will ensure that CIS operators keep a strong focus on compliance and will have broader application beyond trading practices issues. CIS operators and their compliance personnel may be given a greater ability to enforce compliance with a CIS's policies and procedures if they are part of a mandatory compliance program.

21. By applying certain measures to control abusive trading practices and setting them out in a compliance program, CIS operators can demonstrate that they are putting the best interests of CIS investors first and meeting their obligations to act in the best interest of CIS investors.

Disclosure

23. CIS operators should use disclosure as a tool to inform investors of potential conflicts and the actions they are taking to avoid conflicts, treat investors fairly and avoid detriment to investors. Disclosure should inform investors about how CIS operators will accomplish these objectives in connection with market timing and late trading, whilst avoiding specific details that could be used by market timers to circumvent these measures.

24. CIS operators should include disclosure on the following subjects in the offering documents for the CIS:

- *Market Timing Policies and Procedures* that describe:

  (i) the risks, if any, that frequent purchases and redemptions of CIS shares may present for other security holders;

  (ii) whether or not the CIS's governing body/ CIS operator has adopted policies and procedures with respect to frequent purchases and redemptions of CIS securities and, if not, state the specific reasons why it is appropriate for the CIS not to have such policies and procedures;

- *Fair Value Pricing* policies and procedures, that describe whether and under what circumstances a CIS will use fair value pricing and the effects of using fair value pricing;

- *CIS Portfolio Holding's* information and a description of the policies and procedures relating to the disclosure of CIS portfolio securities and any ongoing arrangements to make information about portfolio securities available to any person.

Standard 3: The regulatory regime should allow operators appropriate flexibility in addressing the risk of detriment to investors arising from market timing.

25. The regulatory regime should provide for a flexible range of anti market timing and anti short term trading tools. The regulators should aim to ensure that the steps taken are commensurate with the possible harm and CIS operators should be monitored for possible harm on an ongoing basis.

26. While complying with the existing regulations, the CIS operator should have the flexibility to select those tools that are most appropriate for its investors: e.g. 10 days notice of large purchases; redemption fees; additional charges on 'round trip' trades carried out within a few days of purchase; etc

27. Where there is a failure to meet Standard 1, and market timing and associated issues cause CIS investors or a group of CIS investors to suffer loss, or the CIS suffers dilution, the CIS operator's duty should be to put them back in the position that they would have been in, that is, had the transactions that caused the dilution or loss not taken place. This may mean compensating investors and /or the CIS.

28. Forward pricing could be used to reduce the attractiveness of CIS to market timing funds. CIS operators should consider selling and redeeming on the basis of an unknown/forward price only and combining the cut off time and NAV calculation time in a manner so as to minimize any

arbitrage possibility arising from the timing differences, as the price of the unit would be unknown to the investor at the time of placing the request.

29. When considering short term trading and the steps it wishes to take, the CIS operator may exercise reasonable discretion in determining the appropriate frequency of the trading, given the aims and objectives of the CIS, including any statement of policy made in the prospectus of the CIS about the expected frequency of trading.

30. The exercise of discretion in the management of the risk of market timing should be subject to some form of independent oversight, so as to address the conflict faced by the operator involving the benefit received from the additional assets provided by market timers against the detriment to the CIS of the market timing activity.

IV. CONCLUSION

1. The cumulative impact of market timing and its associated issues of late trading and short term trading have a potentially negative effect on the investment process and raise important investor protection issues. Ultimately, allowing some investors to take advantage of pricing inefficiencies for a short term profit eats away at the profits of long term investors who are the principal focus of virtually all CIS, by driving up the transaction costs. The best practice standards set out in this paper will, we believe, reduce or eliminate the major detrimental effects of market timing, late trading and associated issues.

2. Finally, these issues are not limited to CIS operators. Jurisdictions should act proactively and look for evidence of market timing and related issues in other pooled products that are designed for promotion to and subscription by the public, including other collective investment vehicles marketed to the general public, such as unitized investment funds linked to life policies

APPENDIX

Feedback Statement on the Public Comments Received by the Technical Committee Consultation Report - Best Practices on Anti Market Timing and Associated Issues for CIS

Introduction

1. The IOSCO Technical Committee publicly released the consultation report entitled *Best Practices on Anti Market Timing and Associated Issues for CIS* in February 2005 with a comment period running until May 2005. This statement summarizes the main issues raised in the responses received and discusses some of the policy considerations that Technical Committee (IOSCO TC) and its SC5 addressed in taking this work forward.

Responses - General

2. Comments from ten organizations were received on this consultation paper and SC5 met in Lisbon on the 7 and 8 June 2005 to consider them.

3. Broadly speaking, the majority of the comments received expressed support for IOSCO's work to describe market timing and its associated issues and to identify best practice standards, though there was some concern about the detail.

4. Several respondents indicated that the costs of imposing these standards will ultimately be borne by investors and that the benefits that investors will derive from these standards would be limited, particularly in jurisdictions where there was no significant evidence of market timing or its associated issues.

5. *IOSCO TC Response: We welcome the support received in addressing these issues. We believe that the flexibility built into these standards allows regulators and CIS operators to address market timing and associated issues using the methods suggested in this paper, adopting them to the extent they believe is required and that they can justify on a cost/benefit grounds.*

Standard 1 - CIS operators should act in the best interest of CIS investors

6. Paragraph 4 of Standard 1 proposed that a CIS operator should disclose to investors its policies for dealing with conflicts of interest when it is compensated on the basis of the CIS's net assets. Two respondents questioned this proposal pointing out that the existence of this type of fee arrangements did not necessarily lead to a conflict of interest. Also, they felt that the proposed standard may in that regard have been drafted too broadly and did not take into account that there would have to be an element of collusion between the market timer and the CIS operator for a conflict to arise.

7. *IOSCO TC Response: We agree that not all arrangements where compensation is based on net assets lead to harmful market timing. Our original proposals merely highlighted the possibility of a conflict of interest. We accept that there would have to be an element of complicity with the CIS operator for harmful market*

timing to occur and we have therefore amended the proposed standards to take into account the comments received.

Standard 2 - CIS operators should ensure that their operations and disclosure in respect of market timing and late trading are consistent with Standard 1

8. Portfolio Valuations: There was acceptance that CIS operators should demonstrate that their portfolios were fairly valued. A couple of respondents highlighted the point we made that different jurisdictions have different approaches to the use of fair value; they felt that this could raise significant practical difficulties for a CIS operator that distributes in multiple jurisdictions. A number of respondents highlighted that at best, "fair value" represented an educated estimate based on appropriate processes for making informed valuation decisions.

9. *IOSCO TC Response: Our proposal takes into account that there is a level of subjectivity involved in fair value pricing. Fair value pricing can only be considered as a best estimate and therefore we did not make any changes in the final report.*

10. Agreements with Distributors: A significant number of respondents suggested that it would be very difficult for CIS operators to supervise distributors to identify market timing, particularly when overseas distributors are used. Furthermore, it is very unlikely that distributors would allow CIS operators access to their books and records, and in many cases formal agreements are not in place with all the distributors.

11. *IOSCO TC Response: CIS operators have a role in identifying harmful market timing transactions when they receive orders from third party distributors. However, we accept the commercial reality that there may not always be agreements in place with distributors and that distributors may be reluctant to allow a CIS operator access to their records. There are however circumstances where agreements are in place, for example with fund supermarkets. In this case we would expect them to set out the distributors' role, their anti market timing procedures and their terms should allow the CIS operator access to their records.*

12. External Auditors: Two respondents expressed concern that the proposed standard may impose new and unrealistic obligations on external auditors. Whilst auditors do examine internal controls, these relate to the financial statements and related disclosures and not to obligations related to securities law (for example, late trading and market timing). These respondents also suggested that external auditors may not necessarily have the appropriate expertise.

13. *IOSCO TC Response: In light of the comments received and of further discussions which took place concerning this issue, the related proposed section of Standard 2 that was presented in the consultation report does not appear in the final report.*

14. Disclosure: The comments received supported the approach of using disclosure to inform investors of the risks associated with market timing, late trading, fair valuation and disclosure of portfolio holdings. However, several respondents felt

that too detailed disclosure of potentially sensitive information on policies, trigger levels, etc could be used to circumvent the CIS operator's controls.

15. *IOSCO TC Response: We recognize the value of the points made in the comments received and accept that there is more potential detriment than benefit in detailed disclosure. We have therefore amended our report and related standards to make clear that CIS operators do not need to disclose information that may be used to circumvent their controls.*

Standard 3 - The regulatory regime should allow operators appropriate flexibility in addressing the risk of detriment to investors arising from market timing

16. Many respondents welcomed the principle of a regime designed to allow CIS operators the flexibility to select the tools they considered to be the most appropriate to tackle market timing and associated issues.

17. Whilst expressing support for the principle of compensating investors who have incurred losses, several respondents emphasized that there were no guarantees - however robust the systems put in place to meet Standard 1 - that all instances of inappropriate market timing could be detected. These respondents therefore argued that the proposal to pay compensation in every instance is unreasonable.

18. *IOSCO TC Response: We have amended our proposal to make it clear that CIS operators would be expect to pay compensation where they have failed to meet Standard 1. CIS operators are expected to take reasonable care to establish and maintain systems and controls as are appropriate to their business to meet Standard 1.*