Principles for Dark Liquidity

Final Report



TECHNICAL COMMITTEE

OF THE

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Appendix 1:Feedback statement on the public comments received by the Technical Committee on the Consultation Report – Issues Raised by Dark Liquidity

Appendix 2: Non-Confidential Responses to the Consultation Report

Chapter 1 Introduction

In February 2009, the International Organisation of Securities Commissions (IOSCO) Technical Committee (Technical Committee) approved a mandate whereby the Technical Committee Standing Committee on the Regulation of Secondary Markets (TCSC2) was to examine the key issues raised by the trading of equities in dark pools and the availability of dark orders on traditional equity exchanges. TCSC2 was to enquire whether the increasing use of dark liquidity may have any adverse effects on the market and if so, what options are available to regulators to mitigate these effects. The issues identified by the mandate for examination by TCSC2 were:

- transparency and price discovery;
- fragmentation;
- knowledge of trading intentions;
- fair access; and
- the ability to assess actual trading volume in dark pools.

In October 2010, TCSC2 published a consultation report entitled *Issues Raised by Dark Liquidity* (Consultation Report).¹ The Consultation Report identified and discussed the characteristics of dark pools and dark orders, the regulatory environment in different jurisdictions around the world and concerns with respect to price discovery, fragmentation and market integrity. Twenty-two public submissions were received in response to the Consultation Report. A feedback statement summarising those submissions is attached to this report (Appendix 1) with the non-confidential responses available in Appendix 2.

This Final Report on the *Principles for Dark Liquidity* (Final Report) sets out IOSCO's principles to guide regulators, venues and general users of dark liquidity with respect to the following topic areas:

- pre-trade and post-trade transparency;
- incentives for using transparent orders;
- reporting to regulators;

• information available to market participants about dark pools and dark orders; and

• regulation of the development of dark pools and dark order.

CR05/10 *Issues Raised by Dark Liquidity*, Consultation Report of the Technical Committee of IOSCO, 27 October 2010, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD336.pdf.

The principles establish that pre- and post-trade transparency are central to promote the efficiency of the market and the integrity of the price formation process. They are put forward with the recognition that a one size fits all approach may not be appropriate for all types of trading. Moreover, a number of jurisdictions are currently reviewing their regulatory regimes, including regulation of trading in dark pools and the use of dark orders in transparent markets.

The Technical Committee recommends that regulators consider the structure of their respective markets as a whole to determine how best to implement these principles. Importantly, regulators should seek to ensure that in implementing the principles, they do so in a way that aims to maintain the efficiency of the market and the integrity of the price formation process and, where appropriate, allows for the use of dark pools and dark orders for specific needs/trades.

The Technical Committee notes that there have been a number of industry and regulatory developments in this area and considers it important that regulators continue to monitor trends in trading conducted via the use of dark pools and dark orders. IOSCO intends to review these principles in light of market and regulatory developments.

Chapter 2 Background and Purpose

Global equity market structure has undergone significant changes over the past several years. One result of those changes is that in many jurisdictions, the search for best execution by market participants² now involves the consideration of multiple sources of liquidity for equity securities. These include exchanges and non-exchange trading venues, such as alternative trading systems (ATSs)³ in the United States and Canada, and multilateral trading facilities (MTFs)⁴ in Europe. These trading venues continue to develop new and innovative trading functionality to attract and maintain order flow.

One such innovation is the expanded use of dark liquidity and the development of so-called *dark pools*. Traders have always sought ways to preserve anonymity and execute orders with minimal market impact. Dark liquidity has long existed, for example, in the form of orders being held by *upstairs trading*⁵ desks and liquidity offered by firms that internalise their order flow. In recent years, the handling of dark liquidity has been made more efficient due to the use of new technology and trading models. This has resulted in, among other trends, significant growth in the number of dark pools that do not display any quotations.

For the purposes of this report, a *dark pool* refers to any pool of liquidity that can be accessed electronically and provides no pre-trade transparency regarding the orders that are received by (i.e. reside in) the pool. A dark pool may operate as an ATS, an MTF, a trading facility offered by a dealer (e.g. a crossing system/process), or a facility of a transparent market (such as an exchange). We recognize that dark pools within a single category (e.g. an ATS) may have unique characteristics and incentives behind its structure and mode of operating⁶ and that this may have implications for regulatory responses. Nonetheless, we believe that this high level definition is sufficient for purposes of this report.

Innovation in the market has also sped up the development of dark orders. A *dark order*, for the purposes of this paper, refers to an electronic order that can be automatically executed and

For the purposes of this report, a *market participant* includes both intermediaries and investors.

In the United States, Rule 300(a) of the Securities Exchange Act (1934) defines an ATS as "Any organisation, association, person, group of persons or system (1) that constitutes, maintains or provides a marketplace or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange within the meaning of Rule 3b-16; and (2) does not perform or set self-regulatory organisation functions other than with respect to subscribers' participation in and exclusion from trading. An ATS may include proprietary trading systems, broker-dealer trading systems and electronic communications networks (ECNs), i.e. order matching systems that generally match limit orders." In Canada, the definition of "ATS" is found in National Instrument 21-101 and is similar to that in the United States.

An MTF is a multilateral system operated by an investment firm or a market operator which brings together multiple third-party buying and selling interests in financial instruments in the system and in accordance with non-discretionary rules in a way that results in a contract in accordance with the provisions of Title II of the Markets in Financial Instruments Directive (MiFID).

Upstairs trading generally refers to the situation where a trade in a listed stock is not executed through the listing exchange. Historically, in an upstairs trade, buyers and sellers would negotiate the price and conditions of the trade in the *upstairs* rooms of a brokerage firm. Today, upstairs trading typically occurs electronically at very high speeds.

Optiver, in its comments to the Consultation Report, suggested that it was important to understand what it contends are the five varieties of dark pools: public crossing networks, internalization pools, PING destinations, exchange-based dark pools and consortium based pools. *See also* Table 1, *infra*.

for which there is no pre-trade transparency. The dark order is entered on an otherwise transparent trading venue.⁷ While dark liquidity in its broadest sense has existed in the markets for many years, dark orders became prevalent only with the growth of electronic trading. The benefits of using dark order types were fewer in the past because manual handling of orders, typically by a specialist or market maker, was necessary to trade. With the advent of technology, electronic systems can easily and efficiently execute matching dark orders.

Like dark pools, dark orders have the potential to minimise market impact costs because other market participants are unaware of their existence. They therefore limit the ability of other participants to identify and trade ahead of the interest reflected by the dark order. However, a visible order will typically have priority over a dark order at the same price within a trading venue.⁸

While dark pools and dark orders may meet a demand in the market, they may raise regulatory issues that merit examination. In February 2009, the Technical Committee approved a mandate whereby TCSC2 was to examine the key issues raised by the trading of equities in dark pools and the availability of dark orders on traditional equity exchanges. TCSC2 was to enquire whether the increasing use of dark liquidity may have any adverse effects on the market and if so, what options are available to regulators to mitigate these effects. The issues identified by the mandate for examination by TCSC2 were:

- transparency and price discovery;
- fragmentation;⁹
- knowledge of trading intentions;
- fair access; and
- the ability to assess actual trading volume in dark pools.

The mandate covers dark liquidity in equity securities, but does not include an examination of voice-brokering or the regulation of intermediaries. Furthermore, the mandate does not cover issues relating to how best execution is to be met in relation to dark liquidity or the

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This includes where a trading venue holding the order transmits indications of interest (IOIs) regarding that order. However, it does not include a reserve or *iceberg* order (where the order consists of a displayed part and an undisplayed part). SC2 acknowledges that reserve orders are becoming a common order type among otherwise displayed markets, and raise some of the same issues as do wholly dark orders. However, to limit the scope of this project, SC2 has determined not to examine issues raised by the use of reserve orders at this time.

CSA/IIROC Consultation Paper 23-404, *Dark Pools, Dark Orders, and other Developments in Market Structure in Canada*, October 2009, available at http://www.osc.gov.on.ca/documents/en/Securities-Category2/csa_20091002_23-404_consultation-paper.pdf and at http://www.lautorite.qc.ca/files/pdf/consultations/anterieures/valeurs-mobilieres/090930-23-404f-conspubl.pdf.

The Technical Committee notes that fragmentation is a natural result of broader market developments rather than a direct consequence of trading in dark pools or through the use of dark orders on displayed markets.

interaction of dark orders with transparent orders within a particular market, other than with respect to ways to provide incentives for the use of transparent orders (see discussion under Principle 3).

In accordance with its mandate, TCSC2 conducted surveys to obtain information necessary to examine the above five issues. The surveys requested information from:

- regulators about the regulatory framework surrounding dark pools (reporting, post-trade transparency, requirements related to price discovery) and any regulatory concerns raised by dark liquidity;
- **venues** (including exchanges, ATSs and MTFs) about the regulatory requirements (post-trade transparency, reporting to regulators, requirements related to price discovery), market structure of the venue, the use of indications of interest (IOIs), ¹⁰ and any regulatory concerns raised by dark liquidity; and
- **users** of dark liquidity about the use of dark liquidity, the types of dark pools that are used, advantages or disadvantages of using dark liquidity, concerns relating to free riding, and the impact of dark liquidity on price discovery and IOIs.

This Final Report addresses the key issues previously set out in the Consultation Report and raised in the responses to the TCSC2 surveys.

1. 2001 IOSCO Transparency Report

In its 2001 report entitled *Transparency and Market Fragmentation* (the Transparency Report);¹¹ the Technical Committee stated that "Market transparency... is generally regarded as central to both the fairness and efficiency of a market, and in particular to its liquidity and quality of price formation."¹² While the Transparency Report highlighted the importance of both pre- and post-trade transparency and that the wide availability of trading information may attract participation to a market, it acknowledged that transparency may create disincentives for those that trade large blocks or put up capital to facilitate larger trades. The report stressed a need for regulators "to assess the appropriate level of transparency in any particular product market with considerable care."¹³

The Transparency Report noted that with a market's evolution to multiple trading venues, there comes the need to assess whether regulators should "require all trading venues in an asset class to adopt identical, or broadly similar, transparency arrangements ... it would be desirable to have a coherent transparency regime for an asset class that applies across all

An IOI, in jurisdictions where they are permitted, is the transmittal of an electronic message that provides some information about a resident dark order to selected market participants which is not immediately actionable. Most often this includes at least the symbol and the trading intentions (i.e., buy or sell); sometimes, the size and the actual or implicit price are also included. IOIs can be both inbound and outbound.

Transparency and Market Fragmentation, Report of the Technical Committee of IOSCO, November 2001, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD124.pdf.

¹² Ibid. at page 3.

¹³ Ibid. at page 5.

market venues."¹⁴ The Technical Committee identified two dimensions for regulators to consider when developing a transparency regime – scope of the requirements and their application to different trading methods. Scope relates to the consideration of:

- (i) whether it is appropriate to provide exemptions for entities whose market share falls below a certain threshold, and if so, what that threshold should be; and
- (ii) how far to extend the transparency requirements beyond exchanges. 15

The Transparency Report noted that the same approach may not be suited to all platforms or types of trading. For example, with respect to pre-trade transparency, the Transparency Report stated that the transparency regime should arguably be the same across similar order-book venues but may be different for dealer systems or reference pricing systems. However, it stated that it may be possible to impose the same post-trade transparency regime on all venues, with possibly some differences for large trades. ¹⁶

2. Other Relevant Current International Work

The Securities and Exchange Commission (SEC) in the United States has published a consultation paper that discuss regulatory issues surrounding dark pools.¹⁷ The SEC continues to review the numerous responses received to its paper before proceeding with any regulatory changes.

In Canada, the Canadian Securities Administrators (CSA), jointly with the Investment Industry Regulatory Organisation of Canada (IIROC) published a position paper that outlines a potential framework for the regulation of dark pools and dark liquidity. ¹⁸ The proposed framework included a minimum size for resting orders, the requirement for price improvement for orders under a minimum size, and the priority of displayed orders over dark orders except in certain circumstances. After considering comments received on the position paper, the CSA has proposed changes to existing rules that would introduce a framework for imposing a minimum size threshold for resting dark orders.

In Europe, Directive 2004/39/EC promulgated under the Markets in Financial Instruments Directive (MiFID), is currently being reviewed by the European Commission (EC) and the

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¹⁴ Ibid. at page 13.

¹⁵ Ibid.

¹⁶ Ibid.

SEC Release no. 34-61358, *Concept Release on Equity Market Structure*, January 2010, available at http://www.sec.gov/rules/concept/2010/34-61358.pdf.

¹⁸ CSA/IIROC Joint Position Paper 23-405, Dark Liquidity in the Canadian Market, November 2010, available at http://www.osc.gov.on.ca/documents/en/Securities-Category2/csa_20101119_23-405_dark-liquidity.pdf and at http://www.lautorite.qc.ca/files//pdf/consultations/valeursmobilieres/2010nov19-23-405-cons-fr.pdf. Responses to the Position Paper are available at http://www.osc.gov.on.ca/en/30452.htm. Amendments available http://www.osc.gov.on.ca/en/SecuritiesLaw_rule_20110318_21-101_rfc-notice-proposedhttp://www.lautorite.qc.ca/files//pdf/consultations/valeursamendments.htm and at mobilieres/2011mars18-21-101-23-101-cons-fr.pdf.

Committee of European Securities Regulators (CESR).¹⁹ CESR has published a consultation paper²⁰ on equity markets as part of its own review and to also provide technical advice to the EC to support its review. This consultation on equity markets includes, amongst other things, the examination of pre-trade transparency waivers provided under MiFID and policy options regarding crossing systems/processes operated by investment firms. Numerous responses have been received by CESR, with the consultation period having now closed.²¹ CESR has provided its technical advice to the EC in the context of the MiFID review (CESR Technical Advice), which was largely incorporated into the public consultation of the EC on the MiFID review.²²

Among other things, the CESR Technical Advice concludes that there should be regular reviews of the use of pre-trade transparency waivers by the European Securities and Markets Authority (ESMA) entailing potential recalibration through the setting of binding technical standards. ESMA might in this process deem it necessary to limit the use of certain pre-trade transparency waivers and therefore also limit dark trading. In the EC consultation, it is likewise proposed that ESMA be required to monitor the waivers on an ongoing basis and report annually to the EC.²³

Regarding Broker Crossing Systems (BCS), CESR recommends the establishment of a new regulatory regime. The new regime would require, among other things, the notification of the operation of a BCS to competent Member State Authorities, identification of transactions through a BCS and the fulfilment of certain organisational requirements. Also, it is envisaged that the amount of (dark) trading executed by a BCS would be limited and that a BCS would be required to become an MTF if the volume traded through it exceeds a certain threshold. The EC incorporated these proposals into its consultation by proposing to regulate

¹⁹ In 2011 CI

In 2011, CESR was replaced by the European Securities and Markets Authority (ESMA) as the body responsible for supervising the EU's securities markets and enhancing investor protection. ESMA is one of 3 European Supervisory Authorities that has responsibility for ensuring financial stability and strengthening and enhancing the EU supervisory framework.

CESR consultation paper ref: CESR/10-394, CESR Technical Advice to the Commission in the Context of the MiFID Review - Secondary Markets, April 2010, available at http://www.cesr-eu.org/index.php?page=consultation_details&id=161. This paper was produced in conjunction with 2 other CESR consultation papers as part of the review of MiFID. These 2 other consultation papers as well as other CESR documents related to the MiFID review include CESR consultation paper ref: CESR/10-417, CESR Technical Advice in the Context of the MiFID Review – Investor Protection and Intermediaries, April 2010; CESR consultation paper ref: CESR/10-292, CESR Technical Advice in the Context of the MiFID Review – Transaction Reporting, April 2010; letter to Commission on CESR's technical advice in the context of the MiFID review, March 2010, ref: CESR/10-359; Commission mandate requesting CESR for additional information from CESR in relation to the review of MiFID, April 2010, ref: CESR/MARKT G3/SH/cr Ares (2009); CESR press release, CESR begins the process to overhaul MiFID by consulting on policy options, April 2010, ref: CESR/10-423. These later documents are all available at http://www.cesr-eu.org/.

Responses to CESR consultation paper ref: CESR/10-394 are available at http://www.cesr-eu.org/index.php?page=responses&id=161.

CESR technical advice ref: CSER/10-802, CESR Technical Advice to the European Commission in the Context of the MiFID Review and Responses to the European Commission Request for Additional Information, July 2010, available at http://www.cesr.eu/popup2.php?id=7003. See also European Commission, Public Consultation, Review of the Markets in Financial Instruments Directive (MiFID), December 2010, available at http://ec.europa.eu/internal_market/consultations/docs/2010/mifid/consultation_paper_en.pdf.

Ibid. at page 23.

BCS as a sub-category of the newly proposed category of Organised Trading Facilities (OTF).²⁴

In Australia, the Australian Securities and Investments Commission (ASIC) published a consultation paper discussing proposals for enhancing the regulation of Australia's equity markets, including issues surrounding dark pools.²⁵ ASIC is currently in the process of reviewing the responses received to its paper before it advises the Government on what appropriate changes should be made and has recently indicated that it intends to consult further on pre-trade transparency in 2011.²⁶

²⁴ Ibid. at pages 9 & 11.

ASIC Consultation Paper 145, *Australian equity market structure: Proposals*, November 2010, available at http://www.asic.gov.au/asic/ASIC.NSF/byHeadline/Market-structure.

ASIC Media Release 11-38MR ASIC announces timetable for the introduction of market competition 3 March 2010, available at http://www.asic.gov.au/asic/asic.nsf/byheadline/11-38MR+ASIC+announces+timetable+for+the+introduction+of+market+competition?openDocument

Chapter 3 Characteristics of Dark Pools And Dark Orders

1. **Extent and Use of Dark Pools and Dark Orders**

The following section describes the extent and use of dark pools and dark order types in different jurisdictions. Readers should be aware that the figures are not strictly comparable across jurisdictions due to differing market structures and calculation methodology, although every effort has been taken to make the figures comparable where possible.

The use of dark pools is most pronounced in North America, and particularly in the United States. The SEC reported that "[t]here [were in 2009]...approximately 32 dark pools that actively trade Regulation NMS stocks; they executed approximately 7.9% of share volume in Regulation NMS stocks in the third quarter of 2009."27 SEC staff has estimated that the combined volume percentage of dark ATSs and broker-dealer internalisers - at least in the United States – in Regulation NMS stocks exceeded 30% by the end of 2010.

According to CESR, more than 90% of trading on organised public markets in Europe was pre-trade transparent while, on a quarterly average, 8.9% of all trading in European Economic Area (EEA) shares on regulated markets and MTFs were executed under MiFID pre-trade transparency waivers in 2009.²⁸ CESR, in its technical advice to the EC, has reported that for the first quarter of 2010, 8.5% of all trading in EEA shares on regulated markets and MTFs was executed under MiFID pre-trade transparency waivers.²⁹ Furthermore, on a quarterly average, 1.15% of total EEA trading was executed in broker operated crossing systems/processes in 2009.³⁰ For the first quarter of 2010, this figure increased to 1.5%.³¹

In Canada, the rules surrounding marketplaces allow for the introduction of dark pools, with the interest in dark liquidity slowly increasing. During the last quarter of 2010, the two dark pools in operation in Canada constituted approximately 2.4% and 2.3% of the volume and value traded respectively.³²

There are relatively few dark pools in Australia when compared with Europe and the United States. Most of the dark pools operating in Australia are internal crossing systems/processes operated by large institutional brokers. There are also two dark pools that are open to wider market participation. Over recent years, approximately 19% 33 of trades by value in Australia were executed as large block 'upstairs' trades; the precise amount executed on dark pools in particular is unknown because of the manner in which these types of trades are reported.

²⁷ SEC Release no. 34-61358, page 18.

²⁸ CESR consultation paper ref: CESR/10-394 at item 14.

²⁹ CESR technical advice ref: CESR/10-802, page 8.

³⁰ Ibid. at item 107. For the purposes of its fact finding, CESR defined broker operated crossing systems/processes as "internal electronic matching systems operated by an investment firm that execute client orders against other client orders or house account orders (excluding internal transactions where a house account order matches against another house account order and internal systems used exclusively for systematic internalisation)."

³¹ CESR technical advice ref: CESR/10-802, page 34.

³² IIROC Market Share by Marketplace for the quarter ending 31 December 2010.

³³ ASIC Consultation Paper 145, page 17. This figure includes both voice/manual and electronic executions conducted outside transparent markets.

The use of dark pools in Asia is currently limited. In Japan, however, the number of internal order matching systems/processes operated by large institutional brokers appears to be increasing. Since March 2010, all orders matched inside the dark pools are required to be submitted to ToSTNeT (off-exchange trade execution service offered by the Tokyo Stock Exchange) for trade execution. Based on the statistics released by Fidessa³⁴, trades executed through ToSTNeT amounted to 9.2% of total trades by value for the final week of 2010; although block trades are also included in this statistic, it can be inferred that dark pool trades are no longer insignificant. In Hong Kong, dark pools are mainly brokers' internal crossing systems/processes which account for about 1-4% of the total market turnover. In Singapore, dark pools account for less than 0.5% of the total market turnover.

The Technical Committee notes, however, that the same drivers of dark pool growth in the United States and Europe (i.e. innovative execution platforms and the search for low-cost, low-impact executions) could also drive growth in Canada, Australia and Asia.³⁵

Many of the jurisdictions that allow dark pools to operate also permit dark orders to be submitted in regulated markets, ATSs and MTFs.³⁶ For the European jurisdictions governed by MiFID, dark orders on transparent regulated markets and MTFs may be able to receive a pre-trade transparency waiver/exemption when they are above a certain size or meet the definition of a *negotiated trade*.³⁷ In other jurisdictions, the provision of dark orders is governed by the rules of the exchange or ATS. No figures are available outlining the extent to which dark orders are used.

2. Purpose of Dark Pools

As noted in the introduction, non-transparent pools of liquidity are not a new phenomenon. They have existed for many years, for example, on the floors of manual exchanges and in the upstairs market, where dealers negotiate the execution of large block trades between clients and through the use of their own capital. Dark liquidity has long been used as a way for traders to preserve anonymity and execute orders with minimal market impact. What is new is the automation of dark pools, the widespread availability and the evolution of their use (e.g. for smaller orders at least in some jurisdictions).

Industry respondents to the SC2 surveys indentified a variety of reasons why traders may use dark pools. These include:

• to minimise information leakage;

Fidessa Fragmentation Index - http://fragmentation.fidessa.com/

Water Asia Report, *Leapfrogging Dark Pools*, June 2008, available at http://db.riskwaters.com/public/showPage.html?page=796008.

These jurisdictions include Australia, Canada, France, Germany, Italy, Netherlands, Spain and the United States.

Possible pre-trade transparency waivers include those based on large-scale transactions and negotiated trades (Article 20 and Article 18.1.b respectively of the MiFID Implementing Regulation).

- to minimise market impact costs;³⁸
- to facilitate the execution of large blocks which may be difficult to achieve on transparent markets due to a lack of depth in the orderbook;
- to ensure better control of an order;
- to protect proprietary trading information;
- to manage interaction with algorithms or programs that seek to identify or *sniff* out dark orders used in transparent markets;
- to take advantage of the possibility of price improvement; and
- to minimise transaction costs. 39

3. How Dark Pools Operate

The operation of dark pools varies widely both across and within jurisdictions. Dark pools can be differentiated based upon a number of characteristics, including access rights, the structure of dark pools, the types of orders that may be permitted, how orders are entered, and how prices are referenced and executed. Table 1 below provides an indication of some of these characteristics. It should be noted that not all of these characteristics will be available for all dark pools. Factors such as the status (e.g. ATS or MTF) and the regulatory environment in which they operate may provide different degrees of flexibility for a dark pool.

Table 1: Potential Characteristics of Dark Pools

Characteristics of Dark Pools	Potential Examples of Specific Dark Pool Characteristics
Access	Access to dark pools generally differs depending on the operator and structure of the dark pool. As such, access may be provided to: clients of the participant only; institutional investors only; large broker-dealers only; other trading venues; or a combination of any of the above.
Permitted order types	Common order types which can be entered into dark pools include:

CSA/IIROC Consultation Paper 23-404 noted on page 2 that "Market impact costs occur when the execution of an order moves the price of that security above the target price for a buy order (or below the target price for a sell order). When information is leaked about a large order before it is executed, these costs can increase significantly."

³⁹ Ibid.

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	 market; limit; pegged; midpoint; immediate or cancel; and minimum order quantity (e.g. large-size orders). 		
Order submission	Orders maybe submitted either:		
	 directly via a market participant; indirectly as a result of electronic order routing; or the dark pool may sweep client orders that have been submitted into a broker-dealer's orderbook. 		
Price	Prices within dark pools are often referenced to those on the main		
determination	displayed markets within one or more jurisdictions. Specifically, the		
	execution price may be determined with reference to:		
	• the best bid or offer (BBO);		
	• the midpoint of the BBO;		
	• within the current volume-weighted spread of the BBO; or		
	within the time-weighted average price of the BBO		
Order execution	Orders may be executed within a dark pool:		
	on a continuous basis;		
	during a call auction; or		
	• pursuant to the negotiation by the buying and selling parties		
	of the terms of a trade (e.g. price, volume and settlement date).		
	date).		
Other	Other miscellaneous characteristics of dark pools include:		
	• operational model / structure of a dark pool; ⁴⁰		
	agency vs principal trading;		
	 crossing systems/processes where the broker-dealer is at risk; and 		
	allowance of IOIs.		

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Different types of dark pools exist, including those operated by exchanges, block trading dark pools and internal crossing systems/processes.

Chapter 4 The Regulatory Environment

1. Current Regulatory Approaches to Dark Pool Operators and Dark Orders

(a) Regulation of Dark Pool Operators

Dark pool operators are regulated in a variety of ways across jurisdictions. Some are operated and regulated as exchanges, whilst some have the option of operating and being regulated as a facility of an exchange, in which case the requirements applicable to exchanges apply.⁴¹ Conversely, in many jurisdictions, dark pools may be ATSs, MTFs or crossing systems/processes.⁴²

In Japan, dark pool trades are undertaken by securities firms as internal order matchings, and then routed to the exchange for matched orders to be executed, as required by the supervisory guideline.⁴³ Furthermore, securities firms operating dark pools must be registered as Type I Financial Instruments Businesses and are regulated accordingly.

In Europe, dark pools may be regulated as and operated by regulated markets, or be regulated as an MTF that must apply for regulatory waivers from pre-trade transparency requirements. ⁴⁴ MTFs may be operated either by an exchange or by an intermediary. Requirements applicable to MTF dark pools operated by exchanges and intermediaries are broadly similar. ⁴⁵

In Canada, dark pools are generally regulated as ATSs and are subject to requirements including registration as an investment dealer and membership in a self-regulatory organisation. Dark pools may also be operated as facilities of an exchange and if so, are subject to the exchange requirements. In the United States, a dark pool could be either an ATS or a dealer trading system. Either system must be registered as a broker-dealer, and thus is subject to the laws and regulations applicable to broker-dealers, including, where appropriate, Regulation ATS.

In Australia, dark pools can operate either as a licensed financial market or within the framework of a licensed financial market. When operating within the framework of a licensed entity, trades are registered under the operating rules of the licensed entity. In this instance, the dark pool operator must hold an intermediary licence.⁴⁶

Switzerland regulates its dark pool as part of the national securities exchange and requires an operator to be licensed as an exchange.

⁴¹ Australia and Switzerland.

⁴² Canada, Europe, Hong Kong and the United States.

Otherwise known as "Comprehensive Guidelines for Supervision of Financial Instruments Business Operators, etc."

France, Germany, Italy, Netherlands, and Spain, referencing Articles 18(1) and 19 of the MiFID Implementing Regulation.

⁴⁵ Ibid.

Licensed entities are required to hold an Australian market licence (AML) to operate a financial market. Similarly, entities that provide intermediary services are required to hold an Australian financial services licence (AFSL).

Dark pool operators in Singapore are generally regulated as recognised market operators and must restrict trading access to institutional investors. All trades in Singapore securities must be reported to the national securities exchange.

(b) Regulation of Dark Orders and IOIs

Dark orders are typically subject to the same regulations as displayed orders, with the major exception being that they are not subject to pre-trade transparency requirements.

With respect to all orders (which might include IOIs), several jurisdictions stated that market conduct rules applicable to intermediaries, including best execution, would apply.⁴⁷ Two jurisdictions noted that regulation in this area may depend on when an IOI becomes an order, since, at that point, regulations regarding orders would apply.⁴⁸ In its technical advice to the EC, CESR has recommended that MiFID be amended so as to clarify that an actionable IOI be considered as an order and subject to pre-trade transparency which was also incorporated in the EC consultation.⁴⁹ These requirements would include the transparency requirements applicable to orders.⁵⁰

2. Transparency

All regulators consider transparency, both of current trading interest and recently completed trades, to be a core element in ensuring that markets operate in a fair, orderly and efficient manner. This facilitates market participants', as well as issuers', understanding of both volumes and prices. It also enables them to assess the relative quality of execution they have obtained.

The way in which regulators seek to ensure that a market operates with transparency may vary, however, depending on the manner in which equity securities are traded as well as the way in which markets and the regulatory structure in their countries have evolved.⁵¹ In broad terms, regulators approach transparency arrangements by establishing principles, setting rules and/or by approving trading platform's individual arrangements. Often, the approach adopts several or all of these elements.

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Canada and the United States. In the United States, whether something is considered an order for such purposes will depend on the definition of a "bid" or "offer." See footnote 54, *infra*.

Canada and the United States.

CESR technical advice ref: CESR/10-802, page 17 and EC consultation, page 23.

Refer to the discussion on current approaches to pre-trade transparency. In the United States, if an IOI is priced, then the price must comply with Regulation NMS Rule 612, which governs the numerical increments in which an IOI may be expressed (although this rule only applies to exchanges and broker-dealers). The sender of an IOI is free to send the IOI to whomever it chooses. Priced IOIs may be quotes under the Quote Rule (see footnote 54, *infra*). The recipient of the IOI would, if it wishes to trade with the order underlying the IOI, send an actionable order to the sender of the IOI, with the expectation that the first marketable response would trade with the underlying order.

For example, the nature of pre-trade information published in order-driven markets will differ from that made available in quote-driven markets. The type of participant may also be a factor in determining how much transparency is desirable.

Several jurisdictions allow for the intermingling of dark orders with displayed orders on an otherwise transparent market.⁵² In both Canada and the United States, transparent orders currently receive time priority over dark orders at the same price level within a trading venue. In addition, both jurisdictions have rules requiring better priced, visible, immediately accessible limit orders to be executed ahead of inferior priced limit orders (i.e. order protection rules). This "trade-through"⁵³ protection is only applicable to publicly displayed orders. In Europe, only orders above a certain size are able to remain dark on a transparent market.

(a) Current Approaches to Pre-trade Transparency

Regulators have traditionally attached considerable importance to ensuring that equity markets have high levels of pre-trade transparency. In the EU, for example, MiFID sets out an overarching pre-trade transparency principle. Nevertheless, under certain circumstances, MiFID also provides for *waivers* to pre-trade transparency.

It is important for regulators to ensure that pre-trade information is available, where necessary, on markets in a fair, orderly and efficient manner. This is especially true given the increasingly fragmented and complex nature of markets. At the same time, regulators must also keep in mind the trading interests of professional (i.e. non-retail) investors, who are primarily concerned about the costs of pre-trade transparency as they typically trade in very large sizes. It is these trading interests of professional investors that are often cited as one of the major reasons for the current interest in dark pools and dark orders.

Most regulators do not prohibit dark pools or the execution of dark orders on otherwise transparent markets.⁵⁴ Various features are common amongst jurisdictions where dark trading is permitted, for example regulators:

- do not generally restrict the type of trading venue that may operate a dark pool. Most dark trading takes place within ATSs, MTFs or investment firms;
- may impose conditions upon the operator of the dark pool and/or the execution of dark orders. For example, a trading venue may be permitted to offer dark trading opportunities, but those opportunities might nonetheless be subject to post-trade transparency requirements; and
- may impose limitations on the way in which dark trading, or the execution of dark orders, may take place.

In the United States, any bid or offer⁵⁵ communicated on an exchange by one member to another, or communicated in the OTC market by a market maker, must be displayed.⁵⁶ In

⁵² Canada and the United States.

A "trade through" is a transaction at a price that is inferior to a bid or offer that is displayed and immediately accessible in another market. The prohibition on trade throughs applies only during regular market hours. For further details, see Regulation NMS Rules 600 and 611.

Exceptions to this include Brazil, India and Mexico.

Regulation NMS Rule 600(b)(8) currently defines "bid" or "offer" as "the bid price or the offer price communicated by a member of a national securities exchange or member of a national securities association to any broker or dealer, or to any customer, at which it is willing to buy or sell one or more round lots of an NMS security, as either principal or agent, but shall not include indications of

addition, any order held by an ATS that is communicated to more than one other person (i.e. to two or more persons) must be displayed if a pre-determined threshold is executed.⁵⁷ Finally, customer orders held by an exchange or OTC market maker must generally be displayed unless the order is of a large size or the customer has specifically requested non-display.⁵⁸

MiFID requires all European trading venues (i.e. regulated markets and MTFs) to provide full pre-trade transparency, with limited exemptions available via a *waiver* process. The regulatory regime applies irrespective of any trading thresholds.⁵⁹ No pre-trade transparency requirement currently exists for OTC transactions, with a very limited exception for Systemic Internalisers.⁶⁰

In Canada, all orders (defined as a "firm willingness to buy or sell") are required to be provided to, and disseminated by, the information processor, unless that order is shown to only the employees of an exchange or ATS, or a person or company retained to assist with operating the exchange or ATS. In addition, most of the dark pool participants and dark orders are subject to an "order exposure rule" which requires dealers to enter client orders of a certain value or size on a transparent venue unless, among other exceptions, the dealer provides price improvement to the displayed order.⁶¹

(b) Current Approaches to Post-Trade Transparency

In general, information about trades (including volume, symbol, price, time, and in some jurisdictions, market-place identifier) executed in dark pools must be published immediately. In some specific circumstances, publication of the information may be deferred for large transactions.⁶²

In Australia, if a dark pool operator is a member of the national exchange, all trades are disclosed under the rules of the exchange. In Hong Kong, there are similar requirements, but

interest." The SEC has proposed, however, to amend the definition of "bid" or "offer" to apply expressly to IOIs that are in fact actionable and transmitted by dark pools and other trading venues to selected market participants. The proposed definition would exclude, however, IOIs for large sizes that are transmitted in the context of a targeted size discovery mechanism. See SEC Release no. 34-60997, *Regulation of Non-Public Trading Interest*, November.2009, available at http://www.sec.gov/rules/proposed/2009/34-60997.pdf.

- Regulation NMS Rule 602.
- ⁵⁷ Regulation ATS.
- Regulation NMS Rule 604.
- The Technical Committee notes that internal crossing systems/processes operated by investment firms currently do not fall within the definition of a trading venue under MiFID. However, according to the EC consultation, BCS would be classified as a sub-category of OTFs and be required to apply pre-trade transparency after having converted to an MTF by exceeding a certain threshold. See also EC consultation, pages 9 10.
- Article 4.1.7 of the MiFID Implementing Regulation defines a systemic internaliser as an investment firm which, on an organised, frequent and systemic basis, deals on its own account by executing client orders outside a regulated market or an MTF.
- IIROC Universal Market Integrity Rule (UMIR) 6.3.
- France, Germany, Italy, Netherlands, and Spain.

the trades concluded at participants' dark pools are specifically identified when they are reported to the exchange, thus distinguishing them from other off-exchange trades reported to the exchange. However, the trades concluded on dark pools are disclosed by the exchange to the public together with other off-exchange trades. In Australia, trades are published to the market either immediately through data vendors, or with a 20 minute delay via a website. Furthermore, large trades may qualify for a reporting or publication delay. In Japan and Singapore, owing to the requirement for dark pools operators to send the matched orders into the exchange for trades to be executed, all trades are disclosed under the rules of the exchange.

In Canada, all trades executed on a dark pool are required to be disseminated to the information processor for inclusion in consolidated information in real-time. Trade information is also disseminated by data vendors.

In the United States, all dark pools must report their trades to the Financial Industry Regulatory Authority (FINRA)⁶³ within 30 seconds of execution.⁶⁴ A dark pool is not required to disclose any trading information directly to the public. The information collected by FINRA includes the name of the parties to the trade, although neither counterparty nor execution venue is publicly disseminated.⁶⁵ All trading information is made public by FINRA subject to a national market system plan approved by the SEC.

In Europe, under MiFID, all trades executed on a dark pool are required to be made public by the operator of the dark pool in real-time. Deferred publication is only available in the EU for transactions above a certain size and where the transaction is between an intermediary dealing for its own account and a client account.

Finally, in Switzerland, where the dark pool is an exchange participant, the exchange publishes trade information immediately after the transaction.

The nature of the information that is disseminated to the public also varies across jurisdictions. In one jurisdiction, exchange trade information is disseminated to the public, although actual dark pool volumes are not released to the public. ⁶⁶ In Canada, the public is provided with information about trades executed on dark pools, which includes the specific identifier of the platform. In the EU, where a dark pool is operated by a dedicated dark pool platform, the publication of trades executed on that dark pool includes the specific identifier of the platform. In the United States, all trades (including volume) are made public, although the specific venue identifier for OTC trades is reported only to FINRA.

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FINRA is a self-regulatory organisation that has a statutory obligation to regulate the over-the-counter market.

See SEC release no. 34-61819, March 2010, available at http://www.sec.gov/rules/sro/finra/2010/34-61819.pdf.

Trades that take place on an exchange are publicly reported by the exchange pursuant to its own rules. In addition, all exchanges and FINRA are parties to two "effective transaction reporting plans" that govern the collection, consolidation and dissemination of transaction reports in all NMS securities. Transaction reporting plans are joint plans of SROs filed with and approved by the SEC under SEC Rule 608.

Singapore.

3. Reporting to the Regulator

A requirement that trades executed on dark pools be reported to regulators is common across jurisdictions, although the nature of the information that is reported varies. In some jurisdictions, if a dark pool operator is a member of an exchange, or if trades are executed on a national exchange, post-trade information must be provided to the regulator soon after the trade is executed, although exceptions may exist for large-volume transactions. For example, reporting from the exchange to the securities commission is done on a real-time basis in one jurisdiction, ⁶⁷ while in another jurisdiction, trading information from dark pools is provided to the regulator in real-time. ⁶⁸ In EU countries, information about transactions as well as the specific identifier of the trading platform is reported soon after the trade is executed (by the end of the next trading day) to the applicable regulator by the investment firm or the trading venue. In other jurisdictions, dark pools must submit quarterly reports regarding trade information to the regulator. ⁶⁹ In one jurisdiction, that information forms part of the total exchange trade information, which is disseminated to the public; however dark volumes are not specifically provided to the public. ⁷⁰

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Hong Kong.

⁶⁸ Canada.

⁶⁹ Canada, Singapore and the United States (for ATSs only).

⁷⁰ United States.

Chapter 5 Regulatory Concerns

The Technical Committee has identified a number of issues surrounding the use of dark pools and dark orders in transparent markets,⁷¹ many of which are not unique to these types of orders. These issues surround:

- the impact on the price discovery process where there is a substantial number of dark orders and/or orders submitted into dark pools which may or may not be published;
- the impact of potential fragmentation on information and liquidity searches; and
- the impact on market integrity due to possible differences in access to markets and information.

1. Price Discovery

Price discovery is the process through which the current market price for a security is established for, among other things, effecting an execution or valuing an existing holding. The discovery of a security's market price is derived from the supply of and demand for the security, which indicates a participant's willingness to transact at a given price, and information about transactions which have actually occurred. The more interest that is being expressed, the more accurate the market price is likely to be.

The ability to trade without publicly quoting orders is not a new phenomenon. However, there is the potential that the development of dark pools and use of dark orders could inhibit price discovery if orders that otherwise might have been publicly displayed become dark. The Technical Committee considers pre-trade transparency to be a key element of the price discovery process. If enough orders are not transparent to participants, or there is unequal or incomplete information about transparent orders, there may be insufficient information about prices for market participants to identify trading opportunities. Because dark orders and dark pools do not contribute to pre-trade price discovery, there may also be concerns about whether they free-ride on the revealed intentions of other participants in the market.

Regulators indicated in their responses to the TCSC2 survey on dark liquidity that they have polices or regulatory frameworks that are aimed at protecting the integrity of the price discovery process. This may be achieved through, for example:

- ensuring transparent orders receive execution priority over dark orders at the same price within a trading venue;⁷²
- ensuring dark pools provide price improvement over the National Best Bid/Offer (NBBO) to small orders;

Different jurisdictions may use different terminology to describe whether information is available in the market. For example, some jurisdictions refer to 'transparent' and 'non-transparent' markets whereas others use terminology such as 'displayed' and 'non-displayed' markets.

Canada and the United States.

- ensuring limited scope for waivers to pre-trade transparency;
- referencing prices within the dark pools to those of the national securities exchange;⁷³ and
- trade through protection.⁷⁴

The Technical Committee also considers post-trade transparency to be an important element of the price discovery process. However, the dissemination of information regarding executed trades on a dark pool is not universal. In response to the TCSC2 survey, regulators in a number of jurisdictions⁷⁵ indicated that total trade volume (including executions resulting from dark orders) is published by exchanges; however, such executions are often not explicitly identified as resulting from dark orders.

As indicated above in Chapter 4, regulators generally receive information about trades executed through dark pools, be it as a result of real-time or periodic trade reporting the dark pool operators must perform, or due to unique identifiers of the trading platforms being allocated to such trades. Despite this access to information, it was felt that some regulatory initiatives may be needed to improve the accuracy of information available.

2. Potential Fragmentation of Information & Liquidity

Another important issue that arises with respect to dark pools is the potential fragmentation of information and liquidity when there are many different dark pools in operation. It should be recognised, however, that there are other potential causes of market fragmentation, wholly unrelated to dark pools; indeed it is an issue in any jurisdiction where multiple markets exist. The growing number of separately organised dark pools poses liquidity search challenges for market participants. In addition to the basic logistical task and cost of establishing connectivity or access to many different venues, multiple dark pools may pose specific information fragmentation problems due to their lack of pre-trade transparency, and the possibility that post-trade information may not, in some jurisdictions, be consolidated with post-trade information from other venues.

In general, unless a trader is able to send and receive an IOI, the only way to know whether a dark pool has liquidity is to route an order to the dark pool. This leads to potentially higher search costs associated with finding hidden fragmented liquidity, resulting in a possible impact on market efficiency with participants having to 'ping' multiple dark pools as a means to assess liquidity.

3. Fairness & Market Integrity

⁷³ Singapore.

Canada and the United States.

Australia, Canada, Hong Kong, Japan, Singapore and the United States.

Canada, Netherlands, Singapore and the United States.

IOSCO has previously noted that one of the three core objectives of securities regulation is to ensure that markets are fair, efficient and transparent.⁷⁷ In respect of this objective, IOSCO previously made the following statements:⁷⁸

- The fairness of markets is closely linked to investor protection and, in particular, to the prevention of improper trading practices. Market structures should not unduly favour some market users over others;
- Regulation should aim to ensure that investors are given fair access to market facilities and market or price information. Regulation should also promote market practices that ensure fair treatment of orders and a price formation process that is reliable; and
- In an efficient market, the dissemination of relevant information is timely and widespread and is reflected in the price formation process.

(a) Fair Access to the Market

The Technical Committee has considered access to trading previously, and concluded that "[w]hile access to information across all trading venues in an instrument should assist investors in obtaining good quality execution and facilitate efficient pricing more generally, access to information is only of limited assistance if it is not also possible to access the trading opportunity." Furthermore, the Technical Committee noted in Section 13.3 (Securities Exchanges and Trading Systems) of IOSCO's February 2008 Objectives and Principles of Securities Regulation report that "[t]he regulator should ensure that access to the system or exchange is fair and objective. The regulator should oversee the related admission criteria and procedures." 80

With respect to dark pools, regulators may need to address concerns relating to fair access to the market, i.e., whether market participants are offered reasonable terms on which to become members of, or to route orders to, the market or trading venue. Concerns arise if certain participants are unfairly denied access to a market. This concern is exacerbated where a dark

implications of any venue wishing to restrict access."

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Objectives and Principles of Securities Regulation, Report of the Executive Committee of IOSCO, February 2008, page i, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD265.pdf. While the Technical Committee notes that a revised version of the Objectives and Principles of Securities Regulation was released in June 2010, we note that the commentary surrounding the principles in the February 2008 document remain current.

⁷⁸ IOSCO Objectives and Principles of Securities Regulation report, February 2008, page 6.

¹⁰SCO Transparency Report, page 16. IOSCO further stated in its Transparency Report that "A particular benefit of some new trading centers is that they open up wider direct access to trade execution (e.g. to institutional investors) than has often been the case with traditional exchanges; and this may sometimes encourage greater exposure of trading interest. But not all trading systems are designed to offer wide access. The degree to which a regulator may wish, or be legally empowered, to require a market center (especially a non-exchange) to provide open access varies across jurisdictions, but regulators should seek to ensure that access to significant centers of price-formation should normally not be denied on any discriminatory basis and examine closely both the motivations and

⁸⁰ IOSCO Objectives and Principles of Securities Regulation report, February 2008, page 42.

pool has a significant market share and participants cannot access the liquidity within the dark pool.⁸¹

As stated earlier, access to darks pools may differ depending on the operator and structure of the dark pool. Generally, access to some crossing systems/processes is restricted to the clients of those systems. Whilst access to exchanges, MTFs and ATSs is restricted to participants or members of the platform, the important issue concerns how these exchanges and platforms select, or restrict, access. For instance, exchanges and/or regulatory authorities may require participants to hold certain licences/registrations as well as meet stringent financial requirements. For clients, however, the ability to trade on exchanges, MTFs, and ATSs can be achieved through their broker-dealers or through direct electronic access.

(b) Fair Access to Information

The Technical Committee seeks to encourage the display of trading interest on a fair and non-discriminatory basis as a key component of price discovery, while recognising that different jurisdictions have taken different approaches to deal with pre-trade transparency. The Technical Committee believes that regulators should verify that all similarly situated market participants have equitable access to trading information on a reasonable and non-discriminatory basis. In other words, any differential access to such information should not unfairly disadvantage specific categories of participants.⁸²

Regulatory concerns with respect to dark pools also arise where access to information regarding the liquidity on dark pools would be provided to a subset of market participants. This would create a two-tiered market which disadvantages those participants that do not receive the information.

This concern is raised in the context of the dissemination of IOIs that contain information about a participant's order in a dark pool. The information contained in an IOI gives the recipients of the IOI information about trading opportunities not possessed by the public. Depending on how much information is disseminated through the use of IOIs, the IOI information may also be used by the recipient to game or trade ahead of the order in the dark pool, as the recipients of an IOI are generally under no obligation to trade against the investor's order. As noted in Chapter 4 of this report, CESR has recommended to the EC that MiFID be amended so as to clarify that an actionable IOI be considered as an order and subject to pre-trade transparency which was incorporated into the EC consultation.⁸³

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In Canada, the approach that has been adopted to deal with this concern is the "fair access" provision that prohibits a marketplace from unreasonably prohibiting, limiting or conditioning access to its services from the time a dark pool commences operation. In the United States, dark pools must provide fair access only when a threshold market share is reached. In Europe, according to Article 42 paragraph 1 of MiFID, regulated markets are required to establish and maintain transparent and non-discriminatory rules, based on objective criteria, governing access to or membership of the regulated market. For dark pools operating as a MTF, Article 14 paragraph 4 of MiFID requires that investment firms or market operators operating a MTF establish and maintain transparent rules, based on objective criteria, governing access to its facility.

⁸² IOSCO Objectives and Principles of Securities Regulation report, February 2008, page 43.

EC consultation, page 23.

(c) Disclosure & Rules of Conduct

Some commentators have raised concerns about the degree to which market participants understand how dark pools and dark orders in transparent markets function. Lack of information about the operations of dark pools and dark orders may result in market participants making uninformed decisions regarding whether or how to trade within a dark pool or using a dark order. This could result in a lack of confidence in the operation or efficiency of the market or the regulatory framework, should the participant not understand the "rules of the game."

The following types of information could be useful for market participants:

- execution allocation (e.g. if the facility is a call market, is the allocation pro rata or based on time priority);
- the interaction between dark and light orders;
- types of participants;
- where IOIs are permitted in a jurisdiction, what information is provided and to whom; and
- whether a participant can opt out of having IOIs sent regarding its own orders.

Chapter 6 Principles to Address Regulatory Concerns

The Technical Committee believes that it would be appropriate for member jurisdictions to consider the principles set forth below regarding the regulation of their markets, including the regulation of dark pools and dark orders. Two of the principles relate to transparency of trading activity to the public, with a further four principles also warranting consideration by regulators: priority of transparent orders, reporting of trade information to regulators, information available to market participants and the regulation of the development of dark pools and dark orders.

In general, the principles are designed to:

- minimise the adverse impact of the increased use of dark pools and dark orders in transparent markets on the price discovery process by generally promoting pre-trade and post-trade transparency and encouraging the priority of transparent orders;
- mitigate the effect of any potential fragmentation of information and liquidity by generally promoting pre-trade and post-trade transparency and consolidation of such information;
- help to ensure that regulators have access to adequate information to monitor the use
 of dark pools and dark orders for market monitoring/surveillance purposes and to
 enable an appropriate regulatory response to market developments; and
- help to ensure that market participants have sufficient information so that they are able to understand the manner in which orders will be handled and executed.

Despite the concept of dark pools differing across jurisdictions, the Technical Committee notes that the following principles provide a starting point for consideration and analysis by regulators. The Technical Committee also recognises that some jurisdictions are reviewing their regulatory regimes surrounding dark pools and dark orders. Consistent with its statement in the Transparency Report that the same approach may not be suited to all platforms or types of trading,⁸⁴ the Technical Committee notes that implementation of the principles may vary according to the type of trading and platform.

Topic 1: Transparency to Market Participants and Issuers

Principle 35 of IOSCO's June 2010 Objectives and Principles of Securities Regulation report states that "Regulation should promote transparency of trading" Section 13.5 (Transparency of Trading) of IOSCO's February 2008 Objectives and Principles of Securities Regulation report stated: Regulation report stated: 86

IOSCO Transparency Report, page 13.

Objectives and Principles of Securities Regulation, Report of the Executive Committee of IOSCO, June 2010, page 12, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD323.pdf.

⁸⁶ IOSCO Objectives and Principles of Securities Regulation report, February 2008, page 42.

- Ensuring timely access to information is a key to the regulation of secondary trading. Timely access to relevant information about secondary trading allows investors to better look after their own interests and reduces the risk of manipulative or other unfair trading practices;
- Where a market permits some derogation from the objective of real-time transparency, the conditions need to be clearly defined;
- The market authority (being either or both of the exchange operator and the regulator) should, in any such event, have access to the complete information to be able to assess the need for derogation and, if necessary, to prescribe alternatives.

Furthermore, the Transparency Report noted:87

- The more complete and more widely available is trading information, the more efficient the price discovery process should be, and the greater the public's confidence in its fairness; and
- The interest of individual market participants and their customers in transparency levels varies and regulators need to assess the appropriate level of transparency in any particular product market with considerable care.

(a) Pre-trade transparency

Principle 1: The price and volume of firm orders should generally be transparent to the public. However, regulators may choose not to require pre-trade transparency for certain types of market structures and orders. In these circumstances, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

Pre-trade transparency involves a market participant making a bid or offer (e.g., price and volume), thereby giving information to the market. The cost of taking the risk and providing information to the market is offset by the possibility of finding a contra-side and, in the case of maker/taker exchanges, by monetary compensation when an order is executed.

Pre-trade transparency plays an important role in mitigating the potentially adverse impact of market fragmentation (which, as noted previously, is a natural result of broader market developments rather than a direct consequence of dark trading) as well as in promoting the efficiency of the overall price formation process and providing information to market participants to enable them to obtain the best terms of execution. Pre-trade transparency provides a further role by providing information to market participants of trading opportunities that they may be able to utilise.

With regard to dark pools and dark orders, regulators need to clarify the types of orders that

IOSCO Transparency Report, pages 4 - 5.

CESR report ref CESR/09-355, *Impact of MiFID on Equity Secondary Markets Functioning*, June 2009, pages 22 & 29, available at http://www.cesr-eu.org/popup2.php?id=5771.

will be considered firm orders. For example, actionable IOIs⁸⁹ are intended to attract immediately executable order flow to the trading venue and present a unique issue that regulators should examine. Regulators should consider treating actionable IOIs as firm public quotes, which should as such be displayed.

With respect to pre-trade transparency, the Technical Committee:

- notes that, although dark liquidity has long existed as a way for traders to
 preserve anonymity and execute orders with minimal market impact, the
 automation of dark pools and their widespread availability are a more recent
 phenomenon; moreover, the business strategies behind the use of dark liquidity
 have changed (e.g., some users of dark pools break-up large orders into smaller
 ones);
- recognises that different market segments have different trading needs depending on the type of order (e.g. large orders may incur market impact costs if subject to full pre-trade transparency obligations);
- acknowledges these needs, and therefore suggests that it may be appropriate to have different levels of pre-trade transparency apply to different market structures or different order types; and
- recognises that pre-trade transparency is an issue under review in many jurisdictions.

Regulators may not require pre-trade transparency for certain types of market structures (e.g. call markets, reference-pricing venues) or certain types of orders (e.g. large orders of institutional investors that do not wish such orders to be displayed), taking into account the impact on price discovery, fragmentation, fairness and overall market quality considering in particular the relative overall proportion of dark trading compared to lit trading.⁹⁰

In general, however, regulators seek to promote a trading system that fosters order interaction, takes into account the costs and benefits to investors of limited pre-trade disclosure and seeks to ensure that all investors, in particular retail investors, receive best execution. Regulators should thus continually monitor the use of dark pools and dark orders in transparent markets to consider whether there are potential risks to the price discovery process.

(b) Post-trade transparency

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Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should

IOIs are deemed to be actionable when they explicitly or implicitly inform the recipient about available trading interest within a dark pool with the best quoted prices or better.

Some regulatory regimes may permit investors to keep their trading interest to themselves and not compel them to quote it publicly, as long as they do not share it.

consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

Post-trade transparency is the dissemination of information about trades to the public after the trade has occurred. As stated earlier, post-trade transparency is important for the price discovery process and the efficient functioning of markets. For example, reduced information asymmetries provide investors a better informed view of the market, improve the price discovery process and have a potentially positive effect on market liquidity, thus enhancing market confidence. Post-trade transparency can play a role in mitigating the potential negative impact of market fragmentation⁹¹ by revealing which market has offered the best price.

The Technical Committee noted in section 13.3 (Securities Exchanges and Trading Systems) of IOSCO's February 2008 Objectives and Principles of Securities Regulation report that "Information on completed transactions should be provided on the same basis to all participants. Full documentation and an audit trail must be available" Whilst this reference was made in relation to exchanges primarily, it is equally applicable to other types of trading platforms. As noted above, the importance of providing such information aids in the price discovery process.

The Technical Committee notes that dark pools in many jurisdictions are already required to publicly disclose information about executed trades. This information does not, however, necessarily identify the trading venue on which the trade was executed. Regulators should consider whether it is appropriate to require the identity of the dark pool operator to be revealed and, if so, how (e.g. trade by trade and real time; trade by trade and end of day; or end of day and aggregate volumes in individual stocks).

In this context, clear reporting rules and standards, including certainty about which party to a trade should report the trade, may assist regulators in ensuring post-trade information is accurate, complete and comparable. In addition, regulators should consider the benefits of having a consolidated tape to report all trades from all venues, both lit and dark.

Topic 2: Priority of Transparent Orders

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

Regulators that generally permit dark trading in their jurisdiction should look at ways to incentivize market participants within the regulatory framework to use transparent orders. The phrase in the principle, *rather than dark orders*, does not necessarily mean that dark orders in all cases should be discouraged. Rather, the key interest is in taking steps to ensure that there are *adequate transparent orders* in the marketplace. This might be facilitated, for example, by providing for trade through protection for transparent orders. Dark orders that

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Comments earlier in the Final Report regarding fragmentation being a natural result of broader market developments are equally applicable in relation to the discussion of post-trade transparency here.

⁹² IOSCO Objectives and Principles of Securities Regulation report, February 2008, page 43.

interact with the open orderbook should generally match with other undisplayed and displayed orders according to the price-visibility-time priority. The promotion of transparent orders helps to ensure that sufficient liquidity remains in transparent markets to support the price formation process and the orderly overall functioning of equity markets.

In determining whether incentives for displayed orders are appropriate, regulators should take into account the nature of the equities market and its operating rules and the pre- and post-trade transparency regime. Regulators may also wish to consider the interaction of orders between and within venues. Thus, for example, rather than incentivising the use of transparent orders on transparent markets, regulators may choose to have limited exceptions to pre-trade transparency (e.g. by limiting waivers in those jurisdictions in which they are available).

Topic 3: Reporting to Regulators

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

In order to understand the market structure issues posed by dark pools and to monitor trends in trading and trading behaviour for regulatory purposes, it is important that regulators have access to accurate, timely and detailed information regarding trades executed through dark pools, as well as dark orders traded on transparent markets. Important objectives include (1) seeking to ensure the ability of a regulator to monitor and detect trading activity across markets and products that may give rise to market integrity issues; and (2) seeking to ensure that the regulator possesses a sufficient level of detail and aggregation of order and trading data across markets/products so that it can reliably identify the nature of the trading activity and market developments and properly monitor the development of dark pools and dark orders in their jurisdictions. Key information would include the price, symbol, volume, parties to the trade and the venue upon which the trade was executed. The Technical Committee notes that in general, regulators already have the authority to request information regarding trades conducted in dark pools or resulting from dark orders.

It is particularly important for regulators to have access to accurate information regarding the volume of trading that occurs in dark pools as well as the volume of trading that occurs as a result of dark orders executed on transparent markets. In many cases, dark pool operators make public volume statistics that may be misleading as they may include routed orders to other trading centres or other forms of "double counting." Accurate reporting to regulators or access of regulators to information should help to discourage such misleading practices.

Regulators should therefore require that information recorded and provided to them accurately reflects the trading conducted in dark pools and dark orders in transparent markets, and that trading facilities provide such information in a timely fashion and using common conventions (e.g., how to treat orders that are routed away for execution).

Regulators may wish to use this information for a number of purposes, including assisting in tracing orders for market monitoring/surveillance purposes.

The Technical Committee notes that these regulatory purposes may be achieved by different ways. For example, information could be provided to regulators on an ongoing basis or upon

request. In determining the appropriate regime, regulators should consider the nature of the particular market and the applicable pre- and post-trade transparency regime.

Topic 4: Information Available to Market Participants about Dark Pools and Dark Orders

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

It is important that market participants understand the way in which dark pools and dark orders in transparent markets operate.

In its February 2008 Objectives and Principles of Securities Regulation report, the Technical Committee noted, in relation to order routing and trade execution, that "[t]he system's order routing procedures must be clearly disclosed to the regulator and market participants. They must be applied fairly and should not be inconsistent with relevant securities regulation (e.g. client precedence or prohibition of front running or trading ahead of customers). The order execution rules must be disclosed to the regulator and to market participants. They must be fairly applied to all participants... The rules and operating procedure governing these matters should be available to market participants" 1933

Dark pools or transparent markets offering dark orders should ensure that market participants are provided with detailed explanations of:

- how trading occurs;⁹⁴
- how dark orders interact with transparent orders;
- which orders have priority;
- whether IOIs are disseminated, what information they include and to whom they are disseminated; and
- policies and procedures that are intended to facilitate the management and disclosure of conflicts of interest and that provide clarity around who has access to information about the dark pool and/or dark orders.

This information should be provided to market participants so that every participant has the tools necessary to understand the nature and risks of trading in that market. This will

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⁹³ IOSCO Objectives and Principles of Securities Regulation report, February 2008, page 44.

For example, trading facilities should be clear about the level of anonymity given to the participant's orders, whether anti-gaming controls are in place, whether IOIs are allowed and the types of information contained in the IOI, what type of order flow populates the dark pool and the nature of the interaction between client and proprietary order flow. Comprehensive lists of questions are contained in a number of publications, for example, Greenwich Associates, *The Top Ten Questions for Dark Pool Providers*, July 2008; ITG, *Are You Playing in a Toxic Dark Pool? A Guide to Preventing Information Leakage*, June 2008; Aité Group, *Dark Pools 2009, Not so Dark Anymore*, September 2009; and TABB Group, *Trading in the Dark in Europe: Choice and Complexity on the Cusp of Change*, October 2009.

facilitate informed decision making regarding potential trades. It will also help to ensure that trading is conducted in a fair, orderly and efficient manner. Such information should be provided in trading manuals, policies and procedures and rulebooks for trading facilities that offer dark orders and dark pools.⁹⁵

Regulators should consider requiring better disclosure of information to market participants by dark pool operators and operators of transparent markets that offer dark orders. Furthermore, regulators should consider whether to examine/inspect such operators (periodically or on a *for cause* basis) concerning the disclosure to market participants of material information as described above.

Topic 5: Regulation of the Development of Dark Pools and Dark Orders

Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process, and take appropriate action as needed.

In its 2006 report entitled *Regulatory Issues Arising from Exchange Evolution*, ⁹⁶ the IOSCO Technical Committee noted that:

- Regulatory authorities should have adequate arrangements to keep the changing market environment under review and to identify emerging issues in a timely fashion;
- Regulatory authorities should assess whether the changes being made by exchanges require any adjustments to the regulatory framework for an individual exchange or for exchanges generally, and should address any such need for changes promptly; and
- Regulatory authorities should carefully assess the impact on resources of any changes to the regulatory model for exchanges, and ensure that the core regulatory obligations and operational functions of exchanges are appropriately organised and sufficiently resourced.⁹⁷

Whilst these comments were originally made in relation to competing exchanges, they equally apply to dark pools and orders. As more dark pools evolve and equity market structures continually change, it is important that regulators monitor the development of dark pools to ensure that they do not adversely impact on the price discovery process. Moreover, as discussed in topic 3, it is important for regulators to monitor the level of trading being

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The Technical Committee recognises that it is equally important for a market participant to understand their intermediary's smart order routing logic, since it may direct customer orders to one or more dark pools, or may direct dark orders. Thus, although it is beyond the scope of this project and the remit of SC2, it is good practice for regulators to consider appropriate intermediary disclosure obligations to market participants regarding how and when orders, placed by the intermediary on behalf of its customers, may be handled (manually or electronically), including when their orders may be dark or directed to dark pools.

Regulatory Issues Arising from Exchange Evolution, Final Report, Report of the Technical Committee of IOSCO, November 2006, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD225.pdf.

⁹⁷ Ibid. at page 31.

executed through dark pools along with the volume of dark orders being executed on transparent markets to help ensure that sufficient liquidity is being displayed on transparent markets. Where regulators are concerned that the development of dark trading may adversely impact the price discovery process, they should take appropriate action to address such a distortion. Such steps could include a review of the regulatory framework under which the execution of dark orders may take place with the goal of increasing pre-trade transparency. This could lead, in some jurisdictions, to a reduction of such dark orders.



Appendix 1 Feedback Statement in Response to Comments Received on Technical Committee Consultation Report on Issues Raised by Dark Liquidity

Non-confidential responses were submitted by the following organisations to IOSCO Technical Committee (TC) consultation report entitled *Issues Raised by Dark Liquidity*. The deadline for comments was 28 January 2011.

Alpha

Alternative Investment Management Association (AIMA)

Association Française de la Gestion (AFG)

Association Française des marchés financiers (AMAFI)

Blackrock

C A Chevreux

CFA Institute

Chi-X Global

Chris Barnard

Deutsche Bank

Deutsche Börse

European Fund and Asset Management Association (EFAMA)

Financial Industry Regulatory Authority (FINRA)

International Banking Federation (IBFed)

Investment Company Institute (ICI)

Investment Management Association (IMA)

Liquidnet

Optiver

SIFMA-AFME

Tata Consultancy

World Federation of Exchanges

These responses can be viewed in Appendix 2 of this document.

The Technical Committee took these responses into consideration when preparing this final report.

Section I Introductory Comments Made By Respondents

Commenters generally recognized the value of dark liquidity pools, particularly to reduce the costs associated with trading large blocks of securities (e.g., market impact). Representing the majority view, one commenter stated that "dark pools and dark order types represent valuable trading tools for participants, and can ultimately be used to improve trading performance. A participant's use of dark liquidity will depend on its execution objectives, with the trade off between the potential for reduced market impact costs [e.g., by using a dark pool] weighed against the opportunity cost of missing a trade [which is a reason to trade on a "lit"market]."

One commenter argued that the paper lacks a good description of the different *types of dark pools* that are commonly operated in the financial market. It stated that "[d]ark liquidity cannot be considered generically. There are in fact different degrees of dark liquidity." The commenter refers to a "taxonomy of the different types of dark pools was provided by Mittal." Mittal identified five different types of dark pools, that all have certain incentives for operating such a pool.

Related to this point, a number of commenters indicated that regulators should "continue to perform empirical analysis of the effect of dark liquidity on transparent markets." They indicated that it was important for regulatory authorities to consider the varying business models and trading mechanisms of dark pools; and that regulators should consider whether regulatory responses should differ depending on the characteristics of the dark venue.⁶

The Consultation Report defined a *dark pool* generically as referring to any pool of liquidity that can be accessed electronically and provides no pre-trade transparency regarding the orders that are received by (i.e., reside in) the pool. According to the Consultation Report, a dark pool may operate as an ATS, an MTF, a trading facility offered by a dealer (e.g. a crossing system/process), or a facility of a transparent market (such as an exchange).

Although the Consultation Report provides a general description of dark pools, we believe that a legitimate question is raised as to the particular characteristics of and incentives behind the various dark pool structures and the potential implications for regulatory responses. Although IOSCO has not had the opportunity to examine more

Optiver.

⁶ ICI.

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Chi-X.

Mittal, H., "Are you playing in a toxic dark pool? A guide to preventing information leakage," Journal of Trading, volume 3, 2008, pp. 20–33.

Optiver suggested, in particular, that it was important to understand what it contends are the five varieties of dark pools: public crossing networks, internalization pools, PING destinations, exchange-based dark pools and consortium based pools. *See also* Association francaise des marches financiers; IBI; Alpha (when examining dark pools, regulators should determine whether there "is clear evidence of harm").

⁵ SIFMA/AFMA.

carefully those characteristics and incentives, we believe that the point merits mentioning in the final report. We have therefore added some language in the report in the background section to highlight (although not resolve) this issue.

With regard to actionable IOIs, the majority stated that they should be viewed as firm orders and should be disclosed. As one commenter stated: "traditional IOIs do not create any information asymmetry and are therefore reasonable whereas actionable IOIs are used primarily to provide information to a selected group of market participants, thus creating the potential for two-tiered access to information...this justifies regulatory intervention."

Section II. Principle Specific Comments Made By Commenters

(a) Pre-trade transparency

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

Commenters agreed nearly unanimously⁸ with this principle. However, the overwhelming majority of commenters stressed the importance of having a transparency regime that permits the trading of large blocks of securities without having a market impact. This is not a major issue within the United States regulatory structure, as any order interest that has not been shared with more than one person may remain dark (there are no *limitations*). However, this is not the case in other jurisdictions, e.g., Europe under Mifid, where, in general, any trading interest must technically be disclosed unless a "waiver" is issued. Thus, many commenters stressed the importance of having a waivers or exemptions from transparency requirements (in particular for block trades and institutional investors), although at least one cautioned about making exceptions too broad, 10 and another indicated that a waiver would never be appropriate for internalizers¹¹ One commenter also warned that any elimination "of the ability to evaluate and choose between a variety of market models can reduce available liquidity (since it returns to the blotter) and inhibit a participant's ability to trade effectively and achieve Best Execution."12

Optiver.

3

Barnard; Chi-X; ICI; Deutsche Bank; Association francaise des marches financiers; Alternative Investment Management Association.

The one exception was a commenter who requested anonymity. That commenter stated that "[p]rinciple one fails to recognize the importance of dark liquidity."

See, e.g., Barnard ("regulators should allow for exemptions to the transparency requirements for orders exceeding a minimum size"); Liquidnet; Blackrock; ICI; Association francaise des marches financiers.

AFG.

¹² Chi-X.

Related to the issue of waivers, one commenter urged SC2 to "amend Principle 1 to specifically recognize the positive role that dark liquidity plays in the marketplace as well as the fact that different levels of pre-trade transparency may be appropriate for different market structures or order types." They argued that dark orders and related trading activity are part of the price discovery process. In response, we note that the Consultation Report already extensively describes the positive role that dark pools and dark orders play in the marketplace.

Nonetheless, in light of the large number of commenters who stressed the importance of exceptions to general pre-trade transparency requirements for those jurisdictions in which this is necessary to *trade dark*, we thought it appropriate to take language that already existed in the report and insert it into the first principle. Specifically, in the Final Report, we revise the second and third sentences of Principle 1 to read as follows: However, regulators may choose not to require pre-trade transparency for certain types of market structures and orders. In these circumstances, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

We believe that this change makes it clear that jurisdictions may conclude that pre-trade transparency may not be appropriate in certain circumstances, e.g., where a trading interest (order) is not shared with more than one person, or to facilitate block trades in a regulatory regime that permits the *waiving* of transparency requirements under certain circumstances.

Finally, one commenter suggests that "dark liquidity venues can be asked to publish dark order book information that can provide a very high level indication of the dark order flow available in the market, such as...[1] publishing an average price (simple/VWAP) or a corresponding price slab for all dark orders at a given point of time as a snapshot...[and (2)] slab based indication of aggregate volume depth available in dark order books at a given point of time as a snapshot."¹⁵

We believe that this comment raises novel and potentially useful ideas regarding how dark liquidity venues can contribute more meaningfully to pre-trade transparency. However, due to the complex nature of the proposal, we think it appropriate for IOSCO to consider this proposal as part of a future project. We do not believe it requires any changes to Principle 1.

(b) Post-trade transparency

Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

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¹³ SIFMA/AFMA.

Ibid. ("market participants using dark order types display orders when market conditions compel them to shift from passive to more aggressive interaction with the marketplace.")

¹⁵ Tata.

Commenters unanimously supported the principle of post-trade transparency. In addition, a number of commenters supported the establishment of a *consolidated tape* in Europe to report all trades, including those executed in dark pools.¹⁶ In response, we have edited the report to make clear that regulators should consider the benefits of having a consolidated tape to report all trades from all venues, both lit and dark.

There was some disagreement with regard to whether and when a dark pool venue should be identified as part of post-trade reporting requirements. A number of commenters argued that the venue should be identified only at the end of the day, not in real time because of concerns about information leakage by identifying a trading particular dark pool venue (e.g., *gaming*)."¹⁷ A minority argued that the venue should be identified in real time.¹⁸ One commenter suggested that there should be end-of-day public reporting of the identity of dark pool operators executing trades, but only of those trades executed in relatively liquid NMS stocks and most European stocks;¹⁹ while another suggested a possible compromise solution where an investment firm would add a generic venue identifier to post trade transparency reports for all transactions executed on such venues.²⁰

Finally, one commenter stated that "in order to ensure that trade information from dark pools is relevant and comparable, standardized counting methodologies should be used... so that volume information reported by dark pools is comparable to that traded on lit markets."²¹

After careful consideration of these comments, TCSC2 concluded that they are generally consistent with the current language of the principle. Implied in the report already is the need to examine the possible impact of identifying the dark pool venue in real time. Thus, the principle was not changed.

DBG expressed great concern about the "weak quality" of OTC post trade date in the EU (there "are currently no clear and uniform rules and standards for the [EU] OTC market"). They stated that "[d]etailed and uniform trade reporting requirements will have to be developed and implemented on a pan-European level." See also Chi-X ("[The] issue with dark pools (and, more broadly, multiple markets) is fragmentation of information, or the inability to receive trade information from multiple dark pools. We believe that this issue can be addressed by the adoption of a consolidated tape, whether mandated by regulation or developed through commercial means"); Cheuvreux Credit Agricole Group (lit and dark transactions will be equivalent only "as long as they are immediately reported to the consolidated tape").

CHI-X; *See also* Finra (should not undercut the legitimate benefits offered by alternative venues); ICI (end of trading day, stock-by-stock basis); AMAFI (regulatory framework can put in place delays for publication of large transactions that would put a firm at risk).

See Cheuvreux ("identification of venues is mandatory"); Optiver (post-trade transparency should be at the same level as for exchanges; there should be no delayed transmission).

SIFMA/AFMA. *See also* AIMA (delay should be as short as possible and graduated for different trades, depending on the liquidity of the share and size of transaction; Deutsche Bank (for less liquid stocks, end of week reporting "is required").

IBF. See also CFA Institute (identification of venue or dark order within post-trade data via generic flag would be useful to gauge level of activity and depth of on-exchange liquidity versus off-exchange liquidity).

Chi-X.

The Consultation Report already states that regulators should consider whether it is appropriate to require the identity of the dark pool operator to be revealed and, if so, how.

Topic 2: Priority of Transparent Orders

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

The overwhelming majority of commenters agreed with this principle.²² One commenter also stressed its support for the priority of transparent orders within a trading venue but that *a_cross-venue requirement* for transparent orders to take priority over dark orders would curtail best execution and disadvantage investors.²³ Nonetheless, general concerns were raised that in the last several years orders that otherwise might have been publicly displayed have become dark.²⁴

One commenter stated that "a lot of dark pools are effectively internalising client order flow. Brokers that operate a dark pool have a discretionary power to decide which order flow they want to trade against themselves. Naturally these brokers tend to prefer trading against the 'uninformed' order flow. This can lead to a situation where there is a relative increase in 'informed' order flow being rerouted to the public markets, leading of course to a widening of the spreads because market participants will be less eager to trade against this flow. And to make things worse, this triggers additional demand for trading in dark pools."²⁵

A second commenter made a similar remark.²⁶ It raised a concern where market operators (MO) are permitted to offer trading in an open limit order book (OB) and a midpoint dark pool (MDP) "at the same time and in the same instrument."²⁷ They state that "[a]lthough the internal linkage is such settings is formally prohibited, these markets seem to be connected via an external link that is operated by the very same MO." "The resulting issues of such a setup are the known issues of any integration of lit and dark orders in one book: The systemic disadvantage for displayed orders: as (1) hidden orders gain priority over displayed orders; and (2) the hidden orders free-ride on the informational content of the visible orders (as they form the basis for the midpoint)." In the opinion of this commenter, it is therefore "very important to analyse

In contrast, one commenter who requested anonymity simply stated that "we do not agree that transparent orders should have priority over dark orders," without providing further explanation as to why. Another minority view was that lit and dark orders should be "segregated" with no interaction. See Cheuvreux.

SIFMA/AFMA.

See, e.g., Optiver.

Optiver. According to Optiver, the relation between internalization of uninformed order flow and widening of the spreads on public markets has been described by D. Easly, N.M. Keifer & M. O"Hara, in "Cream-skimming or profit sharing? The role of purchased order flow", Journal of Finance, Vol. 51, 1996, pp.811-833.

DBG.

Ibid.

the priority of transparent orders over dark orders not only on a venue level but also across different venues and their specific ways of interaction."²⁸

We believe that these comments raise interesting and important questions regarding both internalization and best execution, which may merit future investigation by IOSCO.²⁹ However, these issues go beyond the scope of the dark pools report. We also note that neither of these commenters disagreed with principle 3. The principle has therefore not been changed.

Ibid. See also World Federation of Exchanges (priority of transparent orders should be looked at across trade execution venues – not just within the same trading venue); Alpha (need to ensure that priority of transparent orders occurs across all marketplaces, similar to the 'trade-at' rule proposed by the SEC; this proposal raised, however, major cost and implementation concerns).

See also ICI (broker-deal internalized order flow should be examined and further action should be taken to ensure that internalized orders receive best execution); Deutsche Bank (in non-hybrid books, lit and dark orders should have equal priority and execution of all orders should be driven by best execution).

Topic 3: Reporting to Regulators

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

Commenters unanimously supported this principle; it therefore remains unchanged in the Final Report.

The most extensive comments on this principle came from FINRA. FINRA recommended that the principle be expanded "to embody access to full pre and post trade...transparency data for the relevant market regulators. This would mean the routine gathering of a wide range of data, in electronic form, to produce consolidated order and transaction audit trails, for all market venues that trade a defined subset of securities in a particular jurisdiction...this data [available to regulators only] would drive electronic surveillance and alert functions, and provide historical data on order routing and trading patterns, linked to particular market venues and participants." FINRA cites three overreaching objectives:

- 1. To provide a holistic approach whereby regulators can monitor and detect problematic activity *across markets and products*.
- 2. To guarantee a sufficient level of detail and aggregation of audit trail data cross markets/products so that regulators can reliably identify the nature of the activity (e.g., DMA, HFT, algorithmic trading); and
- 3. Assign a unique market participant identifier (MPID) to financial intermediaries and major market participants such as hedge funds, proprietary trading firms, etc., to help ensure a transparent audit trail.

In response, we do not believe that the principle requires expansion as it is already broad. However, we believe that some of the objectives cited by FINRA merit consideration in the context of dark liquidity by regulators, as they appear consistent with the views expressed by other commenters.³⁰ We therefore add language in the discussion under Principle 4 that briefly describes some of the objectives highlighted by FINRA.

Topic 4: Information Available to Market Participants about Dark Pools and Dark Orders

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See, e.g., Liquidet (supports the reporting of order and trade data as proposed by the SEC in 2010, Exchange Act Release no. 62174); AFG (regulators should have both a reporting regime and means of accessing information, as regulators are supposed to have the means to fulfill their missions); CFA Institute (regulators should consider imposing standards on data quality (e.g. data format, which counterparty is responsible for trade, what constitutes a single transaction); Optiver (regulators should have live access to full order book with full disclosure, on par with exchanges).

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

The overwhelming majority of commenters supported this principle. One commenter summarized well the view that currently in most jurisdictions there is insufficient public information regarding order types and routing practices, that market participants should be provided with comprehensive and clear information, that clients should be informed as to which marketplace their dealers are considering and should have the right to request to either avoid or execute on a specific market.³¹ The principle therefore remains unchanged in the Final Report. Nonetheless, a couple of additional comments merit discussion.

Although one commenter who requested anonymity agreed with the principle, it did so with two caveats: (1) they would only give the information to its clients (not market participants in general); and (2) the disclosed information "should be of a high-level nature only and not confer any Intellectual Property." Similarly, another commenter stated that "[p]rior to mandating, regulators should ensure there is industry consultation on what parties should receive the information, what information should be distributed and how it should be provided to a broad range of stakeholders, including clients, market participants and market operators." In particular, they "recognize that lit and dark market operators have proprietary [e.g., "anti-gaming controls"] and confidential information regarding the operation of their markets however. Some information – for instance, detailed explanations of the policies and procedures for management of conflicts of interest – may be more appropriately provided to a regulator rather than market participants."³³

In response, we emphasize our belief that flexibility is already incorporated into the principle and that it does not mandate specific disclosures. Rather, the emphasis of the principle is that persons who use dark pools should be given *sufficient* information to be able to understand how their orders will be handled and executed. It does not anticipate that the disclosures would include proprietary information not necessary to facilitate this understanding. Indeed, the disclosed information might be sufficient even if it does not include details concerning proprietary anti-gaming controls.

Topic 5: Regulation of the Development of Dark Pools and Dark Orders

Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

The overwhelming majority of commenters supported this principle. The general sentiment behind the principle was well reflected in one comment that regulators "should have the means to monitor the evolution of the volumes of transactions that is

Chi-X.

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³¹ Alpha.

³³ Ibid.

processed through these systems and the power to change rules where it is required."³⁴ One commenter even suggested that regulators should monitor the development of dark pools and dark orders on an *on-going basis*, and not only *periodically*.³⁵ We recognize, however, that 24 hours a day monitoring may not be feasible. Thus, the principle remains unchanged in the Final Report.

A number of commenters focused less on the issue of *monitoring* per se and more on the potential regulatory responses and actions that might result from monitoring. Thus, for example, the following types of concerns were raised:

- "Any proposed regulatory initiatives encompassing action regarding the monitoring or dark pools/dark orders should be subject to a transparent and consultation process that includes a cost/benefit analysis";³⁶
- Regulators will find it difficult to establish the level of liquidity that should be displayed on transparent markets so as not to impact the price discovery process negatively. Any corrective measures on dark liquidity levels should best be taken with a degree of caution, thereby ensuring they are not too difficult to reverse;³⁷
- Regulators should consider the terms of the waivers and consider whether they
 are necessary or set at the right level. Waivers should be applied consistently on
 the same terms to different orders and markets. Regulators should review the
 exemptions used and ensure there is consistency in them, where they involve
 some discretion;³⁸
- "Regulators could look at creating differential and tighter rules for participation in dark pools which may act as entry barriers such as higher capital adequacy norms, stricter due diligence for entry, deeper on-going compliance checks, costlier licenses/membership fees, etc"; 39 and
- Any regulations that seek to mandate pre-trade transparency should focus on smaller orders and not institutional block orders.⁴⁰

In response, we emphasize that the purpose of this principle was not to advocate any particular regulatory action that might result from monitoring. We recognize that the appropriate regulatory response will depend on a number of facts and circumstances, including the nature of the domestic market and regulatory structure, not to mention the

Chi-X.

AIMA.

Liquidnet.

AMAFI. See also Cheuvreux (regulators should monitor the relative proportion of volumes traded on a given stock between lit and dark venues and the proportion of trades that occur within the "best buy best offer" (BBO) and outside the BBO).

³⁵ AFG.

³⁷ IBF.

Tata.

unique characteristics of a particular type of dark pool. Thus, although we note the views expressed, we do not believe that they require changes to the principle.

Finally, one commenter suggested that IOSCO make the standard for dark trading one of "enhancing the quality of the price formation process" rather than "not hindering or eroding the quality of the price formation process on transparent markets." We agree that the overarching goal of regulators is indeed to promote generally the quality of the price formation process. We have therefore modified the principle in the Final Report by deleting the phrase "on displayed markets."

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World Federation of Exchanges.



Appendix 2

Public Comments Received by the Technical Committee on the Consultation Report – Issues Raised by Dark Liquidity

List of Respondents

Alpha

Alternative Investment Management Association (AIMA)

Association Française de la Gestion (AFG)

Association Française des marchés financiers (AMAFI)

Blackrock

C A Chevreux

CFA Institute

Chi-X Global

Chris Barnard

Deutsche Bank

Deutsche Börse

European Fund and Asset Management Association (EFAMA)

Financial Industry Regulatory Authority (FINRA)

International Banking Federation (IBFed)

Investment Company Institute (ICI)

Investment Management Association (IMA)

Liquidnet

Optiver

SIFMA-AFME

Tata Consultancy

World Federation of Exchanges



February 7, 2011

Mr. Werner Bijkerk
Senior Policy Advisor
International Organization of Securities Commissions (IOSCO)
Calle Oqendo 12
28006 Madrid
Spain

RE: Public Comment on Issues Raised by Dark Liquidity

Alpha ATS L.P. would like to thank the IOSCO Technical Committee's Standing Committee on Secondary Markets (TCSC2) for providing us the opportunity to provide comments on "Issues Raised by Dark Liquidity".

The issues surrounding trading of equities in dark pools and the availability of dark orders identified in the mandate for examination were:

- 1. Transparency to Market Participants and Issuers
- 2. Priority of Transparent Orders
- 3. Reporting to Regulators
- 4. Information Available to Market Participants about Dark Pools and Dark Orders
- 5. Regulation of the Development of Dark Pools and Dark Orders

We will provide some general comments and then specifically comment on the topics and principles set out in Chapter 5 of the paper.

General Comments

Dark pools and dark order types have been around for many years and have taken different forms or structures from the upstairs market to separate crossing networks. Since the early use of "dark pools," there have been significant developments in the market structure of equity and other securities markets. The benefits as well as disadvantages of any market structure feature need to be evaluated within the context of current developments such as the maker-taker pricing model and high frequency trading. Also, commercial responses should be allowed to develop without regulatory intervention unless there is evidence of clear harm.

Alpha believes that Dark Pools and Dark Orders can serve investors' interests in the right circumstances. Dark Pools or Dark Orders are also used to protect proprietary trading information, avoid algorithms that are used to identify order parameters and trading strategies, take advantage of possible price improvement, potentially incur lower trading fees, and address inequities caused by the maker-taker fee model. In some jurisdictions, Dark Pools have also evolved to enable dealers to internalize order flow.

Most of the issues surrounding Dark Pools and Dark Orders can be addressed by requiring the following:

- Marketplaces that provide Dark Pool facilities or orders should be transparent about their operations to the public and provide detailed information regarding how their Dark Pool or orders work including disclosure regarding any potential risks, and
- Dealers and other institutions that directly route to Dark Pools should be transparent regarding their decisions to route to Dark Pools and how they consider routing to such markets as part of their best execution obligations.¹

Topic 1: Transparency to Market Participants and Issuers

Proposed Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

Proposed Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

Comment: Alpha supports the general positions set out in Principles 1 and 2 which state that both pretrade and post-trade transparency is important to the price discovery process. However as noted by IOSCO, in its previous work, transparency can be harmful when large sized orders or positions are involved.

In Canada, post-trade information is publicly disseminated by Dark Pools. This fact, combined with the potential for Dark Pools to attract liquidity that would otherwise have been traded upstairs or internalized, allows dark pools to provide access to order flow that would otherwise have been accessible to only a few; we believe this positively affects price discovery. As a result, Alpha believes that Dark Pools can serve investors' interests in the right circumstances and can make a positive contribution to the price discovery process.

Topic 2: Priority of Transparent Orders

Proposed Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent

¹ This could take the form of a dealer's obligation to do best execution reporting.

markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

Comment: We believe priority should be provided to visible orders over Dark Orders at the same price, if it is not a block trade (execution of large size order), to promote the display of visible orders. The principle remains that lit should be preferred over dark if dark is not used to support improved trading performance.

Having said that, if priority of lit orders over Dark Orders at the same price level is required then the only right approach would be to ensure priority of lit orders over Dark Orders across all marketplaces, similar to the "trade-at" rule proposed by the SEC. It should be noted that this rule raised major cost and implementation concerns in the US.

In addition, Alpha is of the view that in many jurisdictions there may be sufficient protection mechanisms in place in the regulatory rules focusing on client priority and order exposure. Also, lit orders already benefit from price protection and are entitled to liquidity posting rewards by virtue of the maker-taker fee model, lit orders have a higher likelihood of a fill and by offering execution immediacy, an exposed lit order is more attractive to an incoming marketable order than a potential Dark Order.

Topic 3: Reporting to Regulators

Proposed Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

Comment: Alpha agrees that regulators, including SROs, should have access to this information.

Topic 4: Information Available to Market Participants about Dark Pools

Proposed Principle 5: Dark Pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

Comment: Alpha agrees that in most jurisdictions including Canada, there is currently insufficient public information regarding the order types offered by marketplaces and routing practices. Moreover we believe that that there is a general lack of education/transparency about Dark Orders. As a result, all market participants, including dealers should be provided with clear, comprehensive information on the features and functionality of a marketplace (dark or lit).

Dealers are subject to and accountable for best execution. However we believe that it is critical that clients are informed regarding which dark (and lit) marketplaces their dealers are considering for executing trades (this should include a description of risks). Clients should always have the right to request a dealer to either execute on a specific market or avoid it.

Topic 5: Regulation of the Development of Dark Pools and Dark Orders

Proposed Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets and take appropriate action as needed.

Alpha is in agreement that regulators should continue to monitor the development of Dark Pools and dark orders in their jurisdiction. In Canada, ATSs are required to complete and submit a Form 21-101F2 (amendment or initial operation report) whenever there is a change to manner of operation/ access of the alternative trading system. In addition, exchanges and ATSs are required to file public notices (via the OSC) regarding proposed changes to certain aspects of their operations.

Alpha wishes to note its view that before any regulatory action is taken to limit the use of dark pools or dark orders is taken, the Regulators should make sure that factual evidence confirms that there is actual harm or market integrity issues. Alpha commends IOSCO for focusing on transparency and regulatory reporting at this stage.

Sincerely yours,

Alpha ATS LP

By: Randee Pavalow



Mr. Werner Bijkerk Senior Policy Advisor International Organization of Securities Commissions (IOSCO) Calle Oquendo 12 28006 Madrid Spain

By email to: darkliquidity@iosco.org

11 February 2011

Dear Mr Bijkerk,

Public Comment on Issues Raised by Dark Liquidity

The Alternative Investment Management Association (AIMA)¹ welcomes the opportunity to comment on the International Organization of Securities Commissions' (IOSCO) Consultation Report on 'Issues Raised by Dark Liquidity' (the 'Consultation').

AIMA members are active participants in all of the securities markets of the major financial jurisdictions and are, of course, particularly interested to see orderly, efficient and well-run markets. As market users, AIMA members wish to see open, transparent markets whenever possible, allowing them to execute their trading strategies and achieve best execution for their investors.

We recognise that dark pools and dark orders have increased over the years, given demand from many market users for exemptions from their orders and bids being publicly reported before execution. Such demand has developed from the need to prevent reporting of pre-trade offers and bids acting against parties' trading interests and strategies. There are dark pools of liquidity in all the major financial jurisdictions today, catering for this demand, and we believe that these should remain, provided that there is a genuine need for these trading venues. We believe that dark pools have a specific and important role in maintaining the efficiency of markets, distinct from that of 'lit' markets, particularly in the area of price discovery. However, AIMA members would like to see more transparent markets whenever possible. We support moves to reduce the delay in the publication of trade data, since that increases transparency.

We fully support IOSCO in producing a set of informative principles that give guidance to global securities regulators in setting rules for establishing and monitoring dark pools. We thank you for this opportunity to comment on these principles and we are, of course, very happy to discuss with you in greater detail any of our comments.

Yours sincerely,

Mary Richardson

Director of Regulatory & Tax Department

AIMA is the trade body for the hedge fund industry globally; our membership represents all constituencies within the sector - including hedge fund managers, fund of hedge funds managers, prime brokers, fund administrators, accountants and lawyers. Our membership comprises over 1,100 corporate bodies in over 40 countries.



ANNEX I

Transparency to Market Participants and Issuers		
Principle 1	The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.	
Comment	We agree that, where possible, the price and volume of firm bids and offers should be transparent to the market. Such pre-trade publication of prices and volumes provides a transparent market so that investors have a clear picture of market prices and demand and can make an informed decision about trading opportunities. In the case of investment managers investing on behalf of underlying clients, this assists managers in providing best execution to their clients.	
	We do, however, recognise the benefits and argument for exemptions from pre-trade transparency requirements for certain types of order or for certain trading venues. As discussed in the Consultation, waivers from pre-trade transparency benefit market users by, for example, minimising the impact of certain types of trades (e.g., large volume block trades) and preventing other parties from trading in front of those trades. For this reason, we would not wish market user choices to be unduly limited by the unavailability of dark pools and dark orders which are of benefit to users and the market. We agree, however, that regulators should regularly assess any waivers from pre-trade transparency in their markets, to ensure they are effectively achieving their intended objectives; where they are not, those markets and orders should be subject to normal pre-trade transparency requirements. It is also important that waivers appropriate for specific markets and trades are considered and provided; they should not be uniformly applied where there are different objectives or different characteristics of trades, requiring different exemptions.	
	We believe that price discovery, market fragmentation, fairness and overall market quality are factors for reasonable consideration by national regulators; however, as the Consultation notes, it should be recognised that dark pools account for only about 10% of total trading volumes, so that their impact on price discovery and quality of the market should not be over-emphasised. Also, market users do benefit from post trade transparency reports with only short reporting delays, which aids general price discovery in the market (see below).	
	It is important that where pre-trade transparency is required that it is only firm bids and offers that are displayed; otherwise, confusion will arise in the market as to the actual tradable liquidity. Actionable indications of interest (lols) may be considered firm bids and offers, provided they are truly actionable, including having all necessary information to be accepted as a bid or offer and not requiring further human interaction.	

² The European Parliament's ECON Report on regulation of trading in financial instruments - 'dark pools' etc. (2010/2075(INI)) refers to approximately10% of all trading in EEA equities shares on organised markets using the MiFID pre-trade transparency waivers and considered to be trading 'in the dark'. The Report also referred to:

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⁻ CESR's data capture exercise, to assess the volume of trades conducted in the dark and whether there is a limit as to what volume of the market, trading without pre-trade price disclosure, actually begins to impact the process of price formation itself; and

⁻ the more advanced US regulation of diverse trading platforms, and whether lessons can be learnt from the US on post trade transparency for dark pools, especially as the UK FSA estimates that less than 1% of equity trading is conducted in the dark by OTC contracts (in the US, dark pools account for closer to 10% of trading volumes).



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Principle 2	Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.
Comment	AIMA members rely on post trade reports to gain valuable information about the market and to discover which markets are offering the best prices, necessary to fulfil best execution requirements for their clients.
	While there are good reasons for exemptions from pre-trade transparency requirements, these reasons are significantly reduced once the trade has been executed. We recognise that many regimes have near real-time reporting for executed trades and that, to avoid information leakages about trades which are conducted in a series, there may be reasons to allow some delay in publication of post trade reports. The length of the delay should be that which is necessary to allow parties to execute their trades in the manner chosen and so that other parties are not able to trade ahead of the interest and profit from the information. The delay for such trades should be as short as possible to achieve those objectives and should be graduated for different trades, depending on the liquidity of the share and the size of the transaction.
	Market regulators should have access to post trade data in near real-time in all circumstances, as a requisite for their oversight of markets.
	Priority of Transparent Orders
Principle 3	In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.
Comment	While we recognise the importance of both 'lit' and 'dark' orders, we believe that Principle 3, as worded, may go slightly beyond what is necessary by requiring regulators to find ways to prioritise transparent orders over dark orders. Although it is desirable that orders are transparent pre-trade, except in limited circumstances where exemptions are necessary for fair functioning of the market, this should not go so far as to discourage dark orders completely.
	We support the suggestion that transparent orders take priority over dark orders where the price is the same. This will, however, occur only in limited circumstances, and in those circumstances parties can execute against dark liquidity at the higher price if this meets their best execution policy/ies (and paying a small premium for the advantage). We believe this encourages orders to be pre-trade transparent except in certain circumstances where it is genuinely necessary for the trader (for example, where executing a large trade in a 'lit' market may allow other trades to trade in front of the interest. In that case, it is genuinely necessary for the trader and his execution strategy).

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Principle 4	Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.
Comment	AlMA fully supports the right of market regulators to have all necessary information about the markets they oversee, including accurate, timely and detailed information regarding trades executed through dark pools and as to dark orders on transparent markets. Regulators should be permitted to use such information for their regulatory and oversight purposes, including tracing of orders and detection of market abuse. However, we would wish regulators to have due regard to keeping confidential the information on dark orders where wider publication would defeat the purpose of the pre-trade transparency exemptions granted.
	Information Available to Market Participants about Dark Pools and Dark Orders
Principle 5	Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.
Comment	AIMA fully supports full disclosure to market users of all information necessary for them to understand the manner in which orders are handled and executed, including importantly how orders are prioritised (e.g. price, followed by visibility, followed by time, etc.) and how lols are disseminated (if applicable). It is important that the market is clear as to market regulators' expectations in this respect and that market operators fully comply with the requirements and treat all market users equally and fairly.
	Regulation of the Development of Dark Pools and Dark Orders
Principle 6	Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.
Comment	We believe that regulators should be conducting periodic reviews of dark pools and monitoring how their use is affecting the availability of prices in the market. As markets change and evolve over time, regulators should consider the terms of the waivers from pre-trade transparency requirements and review whether they are still necessary and whether they are set at an appropriate level where, for example, liquidity of shares and the size of the transaction are conditions of the waiver.
	Where different waivers from pre-trade transparency requirements are used for different shares and for different circumstances, regulators should ensure that these are provided consistently, on the same terms, to different orders and markets. Regulators should review the exemptions used and ensure that there is consistency in them, where they involve some discretion by the regulation.

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Mr. Werner Bijkerk Senior Policy Advisor International Organization of Securities Commissions (IOSCO) Calle Oquendo 12 28006 Madrid Spain

4th February, 2011

Re: ASSOCIATION FRANCAISE DE LA GESTION (AFG)'s comments on IOSCO Consultation Report regarding Issues Raised by Dark Liquidity

Dear Mr Bijkerk:

The ASSOCIATION FRANCAISE DE LA GESTION FINANCIERE (AFG) – French Asset Management Association¹ would like to thank the International Organization of Securities

AFG members are managing more than 2600 billion euros in the field of investment management. In terms of financial management location, it makes the French industry the leader in Europe for collective investments (with more than 1300 billion euros managed by French companies, i.e. 23% of all EU investment funds assets under management, wherever the funds are domiciled in the EU) and the second at worldwide level. In terms of fund domiciliation, French funds are second in Europe and third at worldwide level. Regarding product interests, our association represents – besides UCITS – the employee saving schemes, hedge funds/funds of hedge funds as well as a significant part of private equity funds and real estate funds. AFG is of course an active member of the European Fund and Asset Management Association (EFAMA) and of the European Federation for Retirement Provision (EFRP). AFG is also an active member of the International Investment Funds Association (IIFA).

¹ The Association Française de la Gestion financière (AFG) represents the France-based investment management industry, both for collective and discretionary individual portfolio managements. Our members include 409 management companies and 660 investment companies. They are entrepreneurial or belong to French or foreign banking or insurance groups.

Commissions (IOSCO) for providing the opportunity to submit comments on the Consultation Report regarding 'Issues Raised by Dark Liquidity', issued last October.

We would like to express the following comments regarding the IOSCO Report:

- 1. We applaud the IOSCO Technical Committee for having tackled the issue of Dark Liquidity. The development of Dark Pools and Dark Orders obviously make necessary to assess them from a regulatory perspective.
- 2. We approve and support the 6 Principles proposed by IOSCO. Such Principles show the path for getting a minimum regulatory convergence on this topic at worldwide level.
- 3. On the substance, improving the transparency of Dark Pools and Dark Orders is a general Principle to be followed, at least towards regulators and to some extent towards market participants.
- 4. However, AFG wishes IOSCO and its members to go one step beyond.
- 5. First, regarding Principle 1 on Pre-trade Transparency, AFG considers that the exception to the Principle although legitimate seems to weaken too much the Principle. In terms of drafting of this first Principle, the principle should be developed and the exception proportionately reduced.
- 6. Second, regarding Principle 4 on Reporting to Regulators, we consider that regulators should not have either a reporting regime <u>or</u> means of accessing to information regarding orders and trade information in venues that offer trading in dark pools or dark orders: regulators should have <u>both</u> a reporting regime and means of accessing information, as regulators are supposed to have the means to fulfill their missions.
- 7. Third, regarding Principle 5 on Information Available to Market Participants about Dark Pools and Dark Orders, we think that in addition there should be an incentive for market participants to use 'lit pools'.
- 8. Last, regarding Principle 6 on Regulation of the Development of Dark Pools and Dark Orders, AFG considers that regulators should monitor the development of dark pools and dark orders on an on-going basis, and not only "periodically" as once again this monitoring should be part of the permanent missions of regulators.

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We thank you in advance for your attention to the views expressed above.

If you wish to discuss the contents of this letter with us, please contact myself at +33 1 44 94 94 14 (e-mail: p.bollon@afg.asso.fr), Stéphane Janin, Head of International Affairs Division, at +33 1 44 94 94 04 (e-mail: s.janin@afg.asso.fr), or Adina Gurau-Audibert, Management Techniques Advisor, at +33 1 44 94 94 31 (a.gurau.audibert@afg.asso.fr).

Sincerely,

(signed)

Pierre BOLLON



OICV-IOSCO CONSULTATION REPORT

Issues Raised by Dark Liquidity

Comments by AMAFI

- **1.** Association française des marchés financiers (AMAFI) has more than 120 members representing over 10,000 professionals who operate in the cash and derivatives markets for equities, fixed-income products and commodities. Nearly one-third of the members are subsidiaries or branches of non-French institutions.
- **2.** AMAFI welcomes the opportunity to comment on the Consultation Report (hereafter referred as to the "Report" on "Issues Raised by Dark Liquidity" issued by the Technical Committee of the International Organization of Securities Commissions.
- **3.** Before commenting the principles proposed in the "Report", AMAFI would like to emphasise some general comments.

I) GENERAL COMMENTS

> AMAFI welcomes IOSCO's initiative

4. AMAFI strongly supports IOSCO's proposal to set up principles in order address the issues raised by the developing of dark liquidity. The proposed principles could be implemented rapidly in each jurisdiction.

AMAFI shares the analysis of the "Report" on the issues raised by dark liquidity

- 5. As mentioned in the "Report", dark liquidity has always existed for large orders (upstairs trading) or through the liquidity of brokers which internalise their order flow. But due to the evolution of technology and the recent evolution of regulatory framework (for instance in Europe with the MIFID Directive put in place in 2007 which abolished concentration rules) the number of dark pools has increased in the recent years. This situation raises various questions on the overall functioning of the equity market among them are the following:
 - The quality of the price formation process. The quality of the price formation process could be altered, if the proportion of the orders executed trough dark systems, which are mainly based on pre trade imported price transparency waiver, should increase dramatically.

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- Fair access to the dark liquidity and to information;
- Confidence in the market structure by the investors.

> But AMAFI considers that there is a need for further work on this subject

6. Having saying that, AMAFI regrets that IOSCO, in its analysis of the situation and in its draft principles has remained at a very high level, currently well known by many market participants and regulators. If AMAFI understands that the proposed principles can be useful in jurisdictions where the market regulatory framework has not reached the highest standards, it must be noticed that those principles are already in place in the more mature jurisdictions. AMAFI encourages IOSCO to carry out further work and analysis in phase with the critical nature of the issues for the equity market structure raised by dark liquidity. Given the increasing role in the Financial Stability Board it the context of the G20, AMAFI considers that IOSCO should address the market structure issues at an appropriate level.

Regulatory framework

- **7.** To address the issues mentioned above, which are explained in the "Report", AMAFI considers that the regulation should, at least and at a first stage, be based on the following:
 - Pre trade transparency should be the main rule with clear waiver to this principle (e.g. large orders, pre imported price transparency,;)
 - Post trade transparency for transactions executed in dark pools should be done in real time and available to all market participants for free after 15 minutes and on a reasonable commercial basis before 15 minutes.
 - Dark systems should be supervised by regulators.
 - Regulators should have the means to monitor the evolution of the volume of transactions that is processed through these systems and the power to change the rules when it is required.

II) IOSCO Principles

Topic 1: Transparency to Market Participants and Issuers

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

8. AMAFI strongly supports this principle. Pre-trade transparency should be the main principle. AMAFI considers that actionable IOIs should be in any cases considered as orders.



Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

9. AMAFI agrees with this principle but considers that post trade transparency should be done in real time because this information is a key component of the price formation process. Of course, the regulatory framework can put in place delays for publication, for large transactions when the firm is at risk. Besides that, it is crucial to consider that this information is a public good that should be free after a period of time (15 minutes seems the current benchmark) and available on a reasonable commercial basis before this period AMAFI also considers that the post trade information should identify the dark venue. Therefore, AMAFI suggests the following draft:

Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public in real time. Information should be free for the public after 15 minutes and available on a reasonable commercial basis before. Regulators should regularly assess whether the 15 minutes period could be reduced. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

Topic 2: Priority of Transparent Orders

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

10. AMAFI strongly supports this principle. The price-visibility-time priority is a key element to preserve market integrity.

Topic 3: Reporting to Regulators

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

11. AMAFI considers that it is not acceptable that there remain any market areas with no visibility for the regulators.



Topic 4: Information Available to Market Participants about Dark Pools and Dark Orders

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

12. AMAFI strongly supports this proposal. Such transparency is needed in order to maintain the confidence of market participants and investors in the functioning of the equity market.

Topic 5: Regulation of the Development of Dark Pools and Dark Orders

Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

13. AMAFI strongly supports this proposal.

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Contact:

Emmanuel de Fournoux – Director of Market Infrastructures, edefournoux@amafi.fr +331 53 83 00 70

BLACKROCK

11 February 2011

Mr Werner Bijkerk Senior Policy Advisor International Organization of Securities Commissions (IOSCO) Calle Oquendo 12 28006 Madrid Spain

RE: IOSCO Consultation Report on Issues Raised by Dark Liquidity

Dear Mr Bijkerk:

BlackRock welcomes the opportunity to respond to IOSCO's Consultation Report on Issues Raised by Dark Liquidity. IOSCO's Report is as timely as it is helpful. We especially welcome the regulatory community seeking to enhance its understanding of new equity market structures and thereafter applying an appropriate level of supervisory oversight as part of a wider process of global regulatory reform.

BlackRock is one of the world's leading asset management and risk management firms. We manage over \$3.45 trillion on behalf of institutional and individual clients worldwide through a variety of equity, fixed income, cash management, alternative investment, real estate and advisory products. We do not enter into proprietary business nor do we act as principal. Our client base includes corporate, public, multi-employer pension plans, insurance companies, third-party and mutual funds, endowments, foundations, charities, corporations, official institutions, banks and individuals around the world. BlackRock represents the interests of its clients by acting in every case as fiduciary. It is from this perspective that we engage on all matters of public policy. As risk manager BlackRock has advised on a significant number of high profile and complex mandates following the 2008 financial crisis. As such BlackRock is committed, and has made a strong contribution, to the restoration of financial stability worldwide.

As an active participant in the securities markets globally, we have seen dramatic changes in the last ten years, with technology increasing the overall efficiency of trading and reducing trading costs. Alternative trading venues have been an innovative response to the need of institutional investors to trade large blocks of securities without necessarily revealing their full scale of trading interest, and to lessen the risk of information leakage. As a fiduciary for our clients, we have a strong interest in competitive and efficient markets and a regulatory regime that encourages liquidity, transparency and price discovery.

BlackRock uses so-called "dark" liquidity pools inter alia to seek the possibility of price improvement and to minimise transaction costs, which together contribute to optimising investment performance for our end-clients.

BlackRock broadly welcomes the draft principles IOSCO proposes in its consultation report to address potential issues raised by "dark" liquidity pools.

With respect to **draft Principles 1 and 2**, BlackRock agrees with the approach of aiming for general pre- and post-trade transparency to the public in respect of orders placed in liquidity pools. However, it will, under certain circumstances be appropriate to modify or waive this requirement, for example where information leakage would negatively impact liquidity. In which cases, it is justifiable for regulators to assess the impact on price discovery, fragmentation, fairness and overall market quality. In such cases, we believe that special attention should be paid to factors affecting price formation.

¹ It is unfortunate that what is ostensibly a pejorative term for a market structure that has brought discernable benefit for clients has become ingrained in the terminology of securities markets and policy makers.

BLACKROCK

As regards **draft Principle 3**, BlackRock would support the aim of improving prices as this supports our commitment to clients to always act in their best interest as fiduciary. It could be appropriate in equities trading to give a preference to the price on the public order book unless the order price and/or size provided by the "dark" liquidity pool are not significantly improved.

BlackRock is fully supportive of **draft Principle 4** requiring regulators to have a means of accessing information regarding orders and trade information in alternative trading venues that offer "dark" liquidity or non-public orders.

Provided the disclosure regime is tailored appropriately and sensitively (i.e. by considering where it would be more appropriate in terms of market impact to report in an anonymous and aggregated format), information to market participants about non-public trading interests could be beneficial to the market. BlackRock broadly agrees with **draft Principle 5** therefore as it does with **draft Principle 6** which underlines the need for regulators to keep apace with market developments by periodically monitoring the impact of liquidity pool formation on the efficiency of price formation on public trading markets.

In conclusion, to best fulfil its fiduciary mandate to its diverse global client base it is necessary for investment managers to have access to the full range of equity market structures facilitating access to alternative trading venues as well as on a public order book. It is now appropriate to consider the optimal regulatory regime for such structures and to keep issues such as price discovery, fragmentation, fairness and overall market liquidity under review as the market structures and the nature of the liquidity generated therein evolves. IOSCO's draft principles to address issues raised by liquidity pools make an important contribution to achieve globally consistent outcomes in this area and where implemented will strike an appropriate balance between regulatory oversight and efficient markets.

If we can answer any questions or provide further information regarding this important topic, please do not hesitate to contact us.

Sincerely,

Joanna Cound, Managing Director Scott Cowling, Managing Director



IOSCO Public Consultation: Issues Raised by Dark Liquidity

Comments from Crédit Agricole Cheuvreux

February 11, 2011

About Crédit Agricole Cheuvreux

Part of the Crédit Agricole Group, CA Cheuvreux is the Number 1 pure-agency European equity broker. Its historical, multi-local model positions CA Cheuvreux as a cutting-edge outperformance provider for its 1,200 institutional clients. CA Cheuvreux offers extensive, high value-added services in Research, Sales and Execution. With 90 analysts and economists, and an unparalleled coverage of 700 stocks, CA Cheuvreux is continuously ranked in the Top 5 for European Country research and Top 3 European Corporate Access provider. CA Cheuvreux provides extensive market access to 100 execution platforms worldwide including all major MTFs and Dark Pools. Ranked No. 1 in Sales Trading Client Service, CA Cheuvreux's execution specialists offer a wide spectrum of first-class products. CA Cheuvreux has 14 offices worldwide: Amsterdam, Athens, Frankfurt, Istanbul, London, Madrid, Milan, Paris, Stockholm, Vienna, Zurich, New York, San Francisco and Tokyo. www.cheuvreux.com



Topic 1. Transparency for Market Participants and Issuers

(a) Pre-trade transparency

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

The market microstructure is dependent on many factors, and tick size is the most important of these:

- a) An overly large tick size creates an incentive to trade outside the market, and it is in the interest of players that can source dark liquidity to maintain the visible spread (Best Bid Offer) as wide as possible and to combine this with a lack of transparency on OTC transactions. The introduction of a **consolidated tape** with mandatory immediate reporting and very controlled derogations (only large proprietary transactions traded outside the BBO should be granted a delay) would be a great step towards the reduction of this incentive.
- b) An overly small tick size enables High-Frequency Trading to proliferate, creating a huge number of transactions generating noise and no real volumes that may (as illustrated during the May 6th Flash Crash) lead to a "hot potato effect". The optimal tick size should allow liquidity to gather and prevent it from evaporating.
- c) If left unregulated, tick size can be used as a very effective commercial weapon by the various venues to attract the targeted type of market participants (High-Frequency Traders, for instance), and not to create the optimal market microstructure, hence our position that tick size should be managed by regulators, defined on a **per stock basis**, regularly studied and reviewed, and used as the optimal way to adjust the market microstructure to structural changes.

Once the Lit market is formed around this optimal tick size per stock, the BBO is the result of the price formation process. The Bid and Offer are the true reflection of market conditions (volatility, time of the day, etc.) and afford each investor a wide range of strategies (passive in posting or staying out of the market, aggressive, or any combination) and any transactions made at that price are the end result of that process.

Any transaction, be it Lit or Dark, that occurs at any price, for any size, within the BBO is the outcome of the price formation process, hence all such transactions are equivalent as long as they are **immediately reported** to the consolidated tape.



(b) Post-trade transparency

Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

Cheuvreux agrees that trades executed in dark pools or as a result of dark orders should be transparent to the public and reported without any delay for every trade within the BBO. As the delay granted for trade reporting only applies to trades undertaken on risk (an agency cross must not be delayed), and as the price includes an assessment of that risk, if the trade is within the BBO, this implies a very low pricing of the risk, hence no need for protection and an immediate report on the consolidated tape. This also implies that there is no need to consider the size (large or small) of transactions within the BBO, as every trade is an outcome of the price formation process.

There must be a clear separation between Lit venues and Dark venues, with no possibility for Dark venues to interact with Lit ones (a Dark venue sending orders to a Lit one for example).

Each venue must be identified by a specific code that has to be broadcast, along with the details of the trade, to the consolidated tape.

Cheuvreux believes the identification of venues and thus of their nature (Dark or Lit) is mandatory to have an optimal price formation process, as the post-trade transparency of one trade constitutes the pre-trade transparency of the next trade.

Topic 2. Priority of Transparent Orders

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

Cheuvreux is in favour of a **segregation between Dark and Lit venues**. Consequently, such segregation makes rules of priority of lit orders over dark orders irrelevant.

Topic 3. Reporting to Regulators

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

Cheuvreux supports Principle 4, that regulators should have a reporting regime and means of accessing information regarding orders and trade information in venues, whatever the nature of



the venue, Dark or Lit.

With segregation between Dark and Lit venues as Cheuvreux recommends, regulators would have accurate information regarding trades executed through Dark or Lit venues.

Topic 4. Information Available to Market Participants about Dark Pools and **Dark Orders**

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

Cheuvreux agrees that every venue should provide market participants with sufficient information to be able to understand how their orders are handled and executed, and any discriminatory or derogatory regime under which trades are handled should be described thoroughly. The differences in behaviour of the different venues are the basis for competition between venues and foster creativity and progress, and it must be left to the discretion of the members to decide where to route their flows. However, to decide objectively, the members need accurate and stable information.

As the Committee mentioned, such information should be provided in trading manuals, policies, procedures and rulebooks. However, Cheuvreux would like to point out that the information should be made easily available in a single repository and that venues should follow uniform rules regarding filters and circuit breakers. Cheuvreux recommends that regulators should set these filters and circuit breakers, as well as centralising the rulebooks of all venues.

Topic 5. Regulation of the Development of Dark Pools and Dark Orders

Regulators should periodically monitor the development of dark pools and dark orders in Principle 6: their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

Cheuvreux considers that regulators should periodically monitor the relative proportion of volumes traded on a given stock between Lit and Dark venues, as well as the proportion of trades that occur within the BBO and outside the BBO.

This proportion depends on the market microstructure of the stock itself. As detailed in Principle 1, Cheuvreux thinks that regulation of tick sizes per stock or group of stocks is the optimal key for market microstructure and enables an easy adjustment of the relative weight of market participants and of Dark trading.



Setting the global standard for investment professionals

Mr. Werner Bijkerk Senior Policy Advisor International Organization of Securities Commissions (IOSCO) Calle Oquendo 12 28006 Madrid Spain

11th February 2011

Issues Raised by Dark Liquidity

Dear Mr. Bijkerk,

CFA Institute is pleased to comment on the International Organization of Securities Commissions (IOSCO) consultation report on Issues Raised by Dark Liquidity (the "Consultation").

CFA Institute¹, through its members' experience in international markets and different investment disciplines, represents the interests of investors and investment professionals to standard setters, regulatory authorities, and legislative bodies worldwide. CFA Institute promotes fair, open, transparent, and accountable global capital markets, and advocates for investors' protection.

We welcome the opportunity to comment on issues related to dark pools of liquidity and the use of dark orders within otherwise transparent order book markets. CFA Institute recently published its own report on the operation of equity markets in Europe, addressing market structures that facilitate both "lit" and dark trading, and our comments herein draw from and supplement the findings of that report².

The issues related to dark liquidity concern the efficient functioning and integrity of the structure of financial markets. We support measures designed to improve the transparency of equity markets and the quality and accessibility of trade data, which are critical for the efficiency of the investment decision-making process. We hope that the proposals contained in the Consultation serve to establish best practices among jurisdictions with regards to the regulatory framework surrounding dark liquidity.

¹ CFA Institute is a global, not-for-profit professional association of over 102,000 investment analysts, portfolio managers, investment advisors, and other investment professionals in 135 countries, of whom more than 92,000 hold the Chartered Financial Analyst® (CFA®) designation. The CFA Institute membership also includes 135 member societies in 58 countries and territories.

² See CFA Institute, 2011, *The Structure, Regulation, and Transparency of European Equity Markets under MiFID* (January): http://www.cfapubs.org/toc/ccb/2011/2011/3



General Comments

The Consultation provides a good account of the characteristics of dark pools and dark orders, detailing the extent of their use, their purpose, and how they operate.

The regulatory concerns surrounding the use of dark pools and dark orders cited in the Consultation include:

- The impact on the price-discovery process where there is a substantial volume of dark liquidity which may or may not be published;
- The impact of potential fragmentation on information and liquidity searches; and
- The impact on market integrity due to possible differences in access to markets and information.

We broadly agree with this assessment. In general, as elucidated in our report *The Structure, Regulation, and Transparency of European Equity Markets under MiFID*, CFA Institute believes that policy measures should support greater transparency and greater consistency in the application of transparency rules within the regulatory framework.

Such a policy approach would help to preserve the integrity of the price discovery mechanism carried out by lit markets, bolster market liquidity and efficiency, and mitigate the potential for the distortionary effects of regulatory arbitrage arising from uneven rules among similar types of trading venues.

The Consultation sets forth six principles to address the issues raised by dark liquidity. CFA Institute supports each of these principles. Our specific comments in relation to each principle are set out below.

Specific Comments

Topic 1: Transparency to Market Participants and Issuers

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

Pre-trade and post-trade transparency is an important over-arching principle that should form the basis of any regulatory framework for equity markets.

In general, the visibility of prices and trading interest reduces informational asymmetries amongst market participants, improves price discovery, and bolsters liquidity. Moreover, transparency underpins investor confidence and supports the efficient functioning and integrity of equity markets.

The importance and relevance of transparency is well captured by the Markets in Financial Instruments Directive (MiFID) Implementing Regulation³, which notes that a high degree of

³ Recital 5, Commission Regulation (EC) No 1287/2006, implementing Directive 2004/39/EC (MiFID).



transparency is essential to ensure a level playing field between trading venues and to mitigate any adverse effects on price discovery from the fragmentation of liquidity across venues.

Within this framework, dark liquidity - whether in the form of non-displayed orders on otherwise transparent venues, or in the form of dark pools⁴ - serves an important, but limited role.

The primary purpose of dark pools and dark orders⁵ is to reduce information leakage and minimise market impact costs. For this reason, such facilities have historically been popular for execution of block orders. As such, the ability to use dark orders or to trade in non-displayed venues can enable investors to obtain efficient, low-cost executions for non-standard types of business.

However, use of such dark trading should be limited to transactions that are large relative to normal market sizes or that have non-standard terms. There is little economic rationale for transacting standard marketable order flow in dark venues.

Moreover, the use of dark transactions for standard orders that would otherwise be traded on displayed (or 'lit') venues can harm market efficiency and integrity. Specifically, by depriving the market of otherwise displayed liquidity, investor confidence in the reliability of market prices may be undermined and the price-discovery mechanism may be impaired. Furthermore, the quality of prices in dark pools would also be impaired, because such prices are established by reference to those on lit trading venues.

Therefore, it is appropriate that the use of dark pools and dark orders be limited to genuinely large or non-standard transactions. It is also necessary that dark orders and dark trading venues engaging in similar types of business are subjected to the same rules, in order to provide for a level playing field amongst trading venues and to mitigate the scope for regulatory arbitrage.

Collectively, these factors would help uphold the proportion of trading on transparent venues, thereby bolstering overall market integrity.

Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be made transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

⁴ The term 'dark pools' is commonly used to describe trading venues (such as dark MTFs in Europe or ATSs in the United States) and execution facilities (such as broker/dealer crossing systems) that facilitate the interaction

of purely non-displayed liquidity.

⁵ A discussion of the interaction between dark orders and displayed orders on integrated order books, as well as the operation of purely dark trading facilities, is discussed in detail in *The Structure, Regulation, and Transparency of European Equity Markets under MiFID* (CFA Institute, 2011).



Post-trade transparency - the dissemination of the details⁶ of executed trades - also supports the efficiency of price formation. Post-trade transparency is necessary to enable accurate and timely security valuation and to allow investors to determine whether they have received best execution of their orders.

Investors need timely access to post-trade data in order to build a complete and clear picture of market prices and trading activity. Accordingly, post-trade data should be reported as close to real-time as possible, and only deferred (for an appropriately short period) where the trade in question is genuinely large relative to normal market sizes. Furthermore, the same post-trade reporting framework should apply to all trading venues and to over-the-counter (OTC) transactions, irrespective of where the transaction takes place.

The identification of a dark venue or a dark order within post-trade data, such as through the use of a generic 'dark' identifier or flag in post-trade reports, would be very useful for both investors and regulatory authorities to assess the level of activity being transacted away from lit order book markets. Consequently, investors would be able to better gauge the depth of on-exchange liquidity versus that available in off-exchange, dark venues.

Topic 2: Priority of Transparent Orders

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed in transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

CFA Institute supports measures to promote transparent trading and to encourage the use of transparent orders. Our own analysis⁷ suggests that there is negative correlation between the level of transparency in a market and the level of bid-offer spreads, a key measure of market quality. Consequently, greater transparency in equity markets is broadly beneficial for investors.

Further, as the Consultation rightly points out, "the promotion of transparent orders helps to ensure that sufficient liquidity remains in transparent markets to support the price-formation process and the orderly overall functioning of equity markets".

As noted above, dark pools and dark orders serve an important role; but, in the interests of market integrity, their use should be limited to large or non-standard transactions.

In addition, and as noted in the Consultation, trading venues that operate integrated order books⁸ should give priority to transparent orders over same-priced dark orders. A number of exchanges and multilateral trading facilities (MTFs) in Europe already follow this practice. The priority algorithm for the sequencing of order execution in such markets operates according to price, then visibility, then time of submission. In this way, market participants are incentivised to post displayed orders whenever possible.

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⁶ Typical details reported include price, volume, time of transaction, instrument identifier, currency, etc.

⁷ See CFA Institute (2011)

⁸ Integrated order book markets permit the interaction of displayed and non-displayed liquidity.



Topic 3: Reporting to Regulators

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

Reporting of transactions to regulators is necessary to allow effective market supervision and monitoring of trading activity. In general terms, transaction reporting (i.e. the reporting of trades to regulatory authorities) serves an important role in detecting instances of potential market abuse.

In order to ensure that the information reported is accurate, regulators should consider the implementation of standards over data quality. For example, these would include standards over data format (such as use of an identification code for dark transactions), details over which counterparty is responsible for reporting a given trade, as well as details over what constitutes a single transaction. Improving the accuracy and consistency of trade data is essential to improve the reliability and integrity of the transparency information made available to regulators and investors.

Topic 4: Information Available to Market Participants about Dark Pools and Dark Orders

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

As the Consultation notes, it is important that market participants understand the way in which dark pools and dark orders in transparent markets operate.

In most cases, trading venues, including dark pools, currently make available information on how the venue is structured and how the trading process takes place. Among others, this information includes details of the priority algorithm for order matching, and how dark orders interact with displayed orders. This information is typically made available online, via the publication of exchange guides and rulebooks.

Topic 5: Regulation of the Development of Dark Pools and Dark Orders

Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

This principle reinforces principle 1. It is appropriate for regulators to monitor developments with respect to dark liquidity to ensure that the efficient orderly functioning of the price-discovery mechanism is preserved, and to protect overall market integrity.

The Consultation also notes that "...it is important for regulators to monitor the level of trading being executed through dark pools along with the volume of dark orders being executed on transparent markets to help ensure that sufficient liquidity is being displayed on transparent markets. Where regulators are concerned that the development of dark



trading can adversely impact the price-discovery process of transparent markets, they should take appropriate action to address such a distortion."

We concur with these sentiments.

Please do not hesitate to contact us should you wish to discuss any of the points raised.

Yours faithfully,

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February 3, 2011

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RE: Public Comment on Issues Raised by Dark Liquidity

Dear Mr. Bijkerk:

Chi-X Global Inc. ("CXG" or "we") welcomes the opportunity to provide comments to the International Organization of Securities Commissions (IOSCO) Consultation Report – *Issues Raised by Dark Liquidity* (Consultation Report).

Chi-X Global Inc. is driven to be an industry leader in operating trading venues and generating innovative products and services for the benefit of the financial markets and the global trading community. The company believes that competition increases overall market volumes and improves investor performance, providing benefits to all participants. Chi-X Global operates lit markets in Canada (Chi-X Canada) and Japan (Chi-X Japan), a dark pool in Singapore (Chi-East, a 50/50 joint venture with the Singapore Exchange) and the Chi-Tech technology services unit. In addition, we are in the final stages of receiving a market license to operate a lit venue in Australia (Chi-X Australia). As an operator of a dark pool and lit markets that support dark order types, we believe the unique characteristics of dark liquidity provide benefits to investors and can be used to enhance trading performance.

We commend IOSCO for publishing a framework of oversight principles for dark liquidity. This work should help inform the reviews of dark liquidity currently being undertaken in the United States, Canada and Europe, and will help guide the development of dark liquidity in other jurisdictions where it is either restricted or limited.

Introduction

Dark liquidity has always existed in one form or another. Historically, non-displayed orders would reside on a paper ticket or an individual broker's blotter and therefore only be accessible to each individual broker's respective clients. Until recently, dark liquidity was primarily referred to as "block liquidity," with block trading being driven by relationships between institutional investors and brokers that facilitate through capital commitment. When a block order was received, the broker would typically have called other brokers or institutional investors with whom they had relationships. This resulted in (1) information asymmetry and leakage where only a sub set of market participants were aware of a large order and 2) exclusive access to block liquidity for brokers who receive the "careful call." However, with recent technology and market structure evolution, this historic relationship business changed. As a result, "dark liquidity" is now primarily traded on electronic platforms and the amount of "available" liquidity in the market has increased, allowing more participants to interact with it. This process has democratized access to the non-displayed liquidity that previously resided on certain brokers' blotters.

In our view, the relationship between dark and lit pools is often misunderstood. Contrary to the belief that dark pools compete for liquidity with lit markets, interdependencies can result in greater total "available" liquidity to the benefit of all investors. The notion that dark pools are dislocated or operate independent of visible markets is simply not a reality in the highly automated and connected world of



cash equity trading. By democratizing access to non-displayed liquidity, we believe dark pools represent the fairest and most efficient form of dark trading.

We also believe that dark pools and dark order types represent valuable trading tools for participants, and can ultimately be used to improve trading performance. A participant's use of dark liquidity will depend on its execution objectives, with the trade off between the potential for reduced market impact costs weighed against the opportunity cost of missing a trade. We therefore believe that limiting the ability to use dark pools through restrictive regulation or over-regulation will ultimately disadvantage investors, since dark pools' primary value proposition – their ability to lower implicit trading costs – will no longer be an alternative.

That said, we recognize there may be instances in which the benefits of dark liquidity may be outweighed by its impact on price discovery/formation. This will depend on multiple factors, including the percentage of total volume/value dark liquidity represents, what forms of dark liquidity are permitted, and how they are regulated.

Jurisdictions where the development of dark liquidity is mature can serve as examples for those where dark liquidity has had limited usage, and also help the latter adopt an appropriate regulatory framework. In our experience, strong fair access rules and robust post-trade reporting requirements help ensure that the potential benefits of dark liquidity are available to all participants, and at the same time allow regulators to monitor its development and impact on price discovery.

For those regions where dark pools and dark orders have been in use and widely adopted, we believe it is critical that regulatory reforms be driven by empirical data and not conventional wisdom. Alleged concerns about the adverse impact dark liquidity may have on price discovery and liquidity should be substantiated with empirical data. A cost/benefit analysis should accompany any regulatory proposal, and for this reason, regulators need to have the right tools in place to monitor the development and impact of dark liquidity. If any adverse and material impact is evidenced or trends indicate market degradation, regulators should have the ability to enact and implement reforms quickly. We believe the following requirements will provide regulators with tools to effectively monitor the development of dark liquidity:

- Rules mandating the disclosure of the operations of dark pools and dark orders, including
 descriptions of allocation methodology and how dark orders interact with lit orders. Full
 disclosure will enable both regulators and participants to better understand how dark liquidity
 impacts market dynamics.
- Reporting requirements for broker-dealers and marketplaces on the use of dark orders, including what proportion of total trading is accounted for by dark orders. An accurate reporting regime allows effective monitoring of the usage and impact of dark orders.
- Standardized reporting conventions for dark liquidity and recognized metrics to measure best execution. This will provide an "industry standard" to assess the contribution/impact that dark liquidity has on execution quality and market integrity.

TOPIC 1: TRANSPARENCY TO MARKET PARTICIPANTS AND ISSUERS

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.



Chi-X Global agrees with the principle that orders should be transparent to the public. Firm bids and offers are essential for investors to know what prices are available to trade against. However, in contemplating the market structures and order types that promote pre-trade transparency, regulators should recognize that OTC or dark trading has always existed and that it can serve a useful purpose. With that in mind, we suggest that the key consideration be: "What forms of dark liquidity preserve market integrity and price discovery so the benefits of dark liquidity are optimally balanced with potential drawbacks?" As discussed in the introduction, electronic forms of dark liquidity have brought efficiencies to previously manual processes and democratized access to non-displayed liquidity, both of which have led to increased total available liquidity in jurisdictions that support them.

Specifically, we believe the benefits of dark liquidity, as well as the issues that should be taken into account when creating regulations related to dark liquidity, are as follows:

BENEFITS OF DARK LIQUIDITY

Mitigate Market Impact: Dark pools and dark orders are designed to minimize market impact. One of the key analyses a trader conducts before entering an order into the market is the "market impact vs. opportunity cost trade-off." If the trader concludes that the cost associated with presenting a visible intention is greater than the cost associated with potentially missing a print (i.e. opportunity cost), then a dark pool may be the most appropriate venue for that order. Large orders or those that represent a significant percentage of average daily volume are typically the most sensitive to market impact. However, with the increased use of algorithms, there is a growing desire to obfuscate the pattern recognition that smaller executions can lead to through the use of dark pools. Most algorithms slice the entire "parent order" into smaller "child orders" in an effort to disguise their intentions and mitigate market impact. Dark pools and dark orders offer trading opportunities where only limited trade information is conveyed about the execution of child orders (post-trade information only). This, in turn, increases the difficulty of detecting any pattern being used to execute a parent order. Algorithms, like dark pools, are the electronic manifestation of trading processes that were once manual. Their use has created greater efficiency and increased the productivity per trader.

Price and Size Improvement: Dark pools can offer price and/or size improvement opportunities. An example of a dark pool offering price improvement is one that allows participants to execute at the mid-point of a market's consolidated Best Bid and Offer (BBO). Dark pools that employ minimum order requirements provide size improvement opportunities and actively encourage the placement of "block" orders that otherwise would be left on a trader's blotter. Advancements in technology, specifically the development of algorithms that are adept at interacting with both dark and lit markets, have allowed for the effective interaction between markets by "sharing" a parent order among them. When sourcing liquidity through algorithms and DMA, a trader now has the ability to control the market on which an order rests as well as the other specific venues with which the order should interact. This interplay between dark and lit markets enables traders to implement trading strategies that effectively move orders off their blotters onto a market where they are accessible by other participants. Eliminating the ability to evaluate and choose between a variety of market models can reduce available liquidity (since it returns to the blotter) and inhibit a participant's ability to trade effectively and achieve Best Execution.

Other Benefits: In addition to the traditional benefits of minimized market impact and price and size improvement opportunities, dark liquidity also offers participants the ability to better control their order flow and incur lower transaction costs.



CONSIDERATIONS WHEN PERMITTING DARK FORMS OF LIQUIDITY

Price Discovery: The notion that the "electronification" of dark liquidity adversely impacts price discovery runs counter to what empirical evidence suggests. Globally, spreads have decreased and the "available" liquidity on lit markets has not diminished. This is in part due to the evolving and interdependent ecosystem between dark and lit markets. Technology and enhanced connectivity allow for seamless interaction between dark and lit markets, which encourages investors to increase the overall depth of liquidity posted on exchanges and ATSs. As we've noted, many orders will remain on a trader's blotter without access to dark pools, thereby decreasing "available" liquidity in the market. In addition, post-trade information from dark orders makes a significant contribution to price formation.

Fragmentation: Jurisdictions that have embraced competition have seen investors benefit through reduced trading costs and increased overall liquidity. Although the introduction of multiple markets can lead to additional costs that can be exacerbated by the introduction of dark pools, it is important to realize that the decision to connect to a dark pool is usually not driven by regulatory obligation, but is instead a commercial decision. Secondly, connectivity can be accomplished through a vendor or another participant (i.e., a jitney arrangement). As a result, the costs associated with connecting to dark pools are typically evaluated by each potential participant based on the associated commercial benefit.

Although multiple dark venues may operate within a jurisdiction, advancement in technology and electronic trading solutions mitigate the difficulty of sourcing fragmented liquidity. Dark liquidity aggregation technology is now part of most global dealer offerings, while next-generation smart order routers, DMA platforms and algorithms are able to send orders to multiple venues and intelligently locate and optimize where to source liquidity. As a result, the technological innovations engendered in regions where dark liquidity has developed can be leveraged in others where dark liquidity is still in a nascent phase.

An associated issue with dark pools (and, more broadly, multiple markets) is fragmentation of information, or the inability to receive trade information from multiple dark pools. We believe that this issue can be addressed by the adoption of a consolidated tape, whether mandated by regulation or developed through commercial means. As we will discuss below, we believe trade information about executions in dark pools should be available to the public. As long as a solution exists, fragmentation concerns are minimized.

Fairness: As a general principle, we believe that marketplaces should not be able to deny certain participants access to their services. Jurisdictions that permit dark pool operators to restrict access to a single broker-dealer or a consortium of broker-dealers risk greater fragmentation. By requiring services to be open to all participants, there is no opportunity for "clubs" with exclusive access to be created.

Indications of Interest: An important factor to consider when examining pre-trade transparency is the determination of what constitutes a firm bid or offer. This becomes very complex in jurisdictions where dark pools are permitted to send indications of interest (IOIs). Traditionally IOIs were used to market interest in a particular security. This was of value because the markets either lacked adequate liquidity or because implicit trading costs made it unappealing to execute in the visible market. With the technologies that exist today, we do not believe this practice serves the interest of industry and instead leads to an unlevel playing field, inviting gaming and adversely impacting market integrity. We are therefore strong proponents of the view that actionable IOIs should (a) be treated as orders and (b) be required to be transparent and provided to the public.



Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

Post-trade information about securities prices, including those executed on dark pools, is an essential component of price formation. Not only does information about recent trades impact future trading decisions on cash markets, this information is also used to accurately price derivatives and other related securities. For this reason we support the principle that trade information should be made available to the public and, with limited exceptions, be provided in real-time.

In order to ensure that trade information from dark pools is relevant and comparable, standardized counting methodologies should be used. In the United States, total volumes traded in dark pools are difficult to determine, as certain dark pools report trades on a single count basis, while others report both sides of the trade (double counting). A single counting methodology should be used so that volume information reported by dark pools is comparable to that traded on lit markets.

A second issue is post-trade attribution. Although the first dark pools targeted only large block trades, competition has led to product differentiation where some dark pools today offer price improvement opportunities and others attempt to attract size improvement opportunities. Post-trade information that includes information regarding the market on which a trade takes place may lead to information leakage and undermine one of the main benefits of dark pools – the minimization of market impact. For example, a trade executed in a pool that primarily caters to large block orders may signal to other participants the existence of a large order that can lead to gaming. Therefore, while we feel it is important for executed trades to be attributed to a particular market so that regulators can monitor where liquidity is available, this should be done only periodically (such as at the end of the day). This will aid in price formation, but prevent gaming.

That said, we believe that the post-trade reporting of price and size should be provided in real-time unless there is a compelling reason warranting an exception. One example of an appropriate delay is in Australia, where reporting can be made at the end of the day if proprietary capital has been used to facilitate a large trade. With the market's relatively small size and limited number of dealers, a real-time requirement would likely result in significant information leakage, while the delayed reporting requirement allows the dealer to unwind its position over a reasonable period during the day.

In considering post-trade transparency requirements, regulators should take into consideration the unique market characteristics of the particular region and the associated development, use and forms of dark liquidity that exist.

TOPIC 2: PRIORITY OF TRANSPARENT ORDERS

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

We generally agree that lit orders should be given execution priority over dark orders at the same price within a trading venue. This methodology properly rewards those who are willing to assume the risk of providing information to the market by offering the benefit of priority execution. Ideally, those who contribute the most information and take the most risk will benefit in the following ways:

• The most aggressively priced orders receive "price" priority.



• "Price setters," or those who were first to establish a price point, receive "time" priority.

There is no question that non-displayed orders contribute less to price discovery than displayed orders. For this reason, they should forfeit time priority to those who placed a visible order at the same price.

By ensuring lit orders are given execution priority over dark orders at the same price, the opportunity cost of posting a dark order is increased. A participant's decision to enter an order as either visible or dark is based on the conscious trade off between reducing market impact costs and the opportunity cost of missing a trade. As different investors have different trading objectives, it is important to offer the benefits of dark orders to all participants and allow them to evaluate this decision for themselves. Limiting choice impedes an investor's ability to optimize the full spectrum of trade offs between market impact and opportunity cost.

Other regulatory incentives that have been introduced to encourage the posting of visible orders include order protection rules, rules that mandate posting small client orders on visible markets, the prioritization of client orders over inventory orders and the requirement that an order meet a size threshold to be posted as dark. When participants enter dark orders they bear the risk of a trade executing beyond their limit price at an inferior level. In Canada the order exposure rule requires that all client orders below 50 standard units be posted on a visible market. This not only encourages lit orders to be entered on the book, but also protects client orders from missing a trade after being held by their broker. In addition, the opportunity cost of posting an order in a dark pool may be increased if there is no regulatory requirement to connect to these venues.

Certain jurisdictions currently require orders to meet a minimum size to be exempted from pre-trade transparency requirements. Other jurisdictions have made proposals to support a similar requirement. Although the objective of these proposals may be to create an additional incentive for using transparent orders, any reform that represents a significant change in market structure may result in unintended consequences. For example, mandating a minimum size may limit the advantages of dark orders experienced by retail investors, or cause trader's to return certain orders to their blotters, thereby reversing the trend of more liquidity being available to more participants.

A final complication of introducing a threshold is selecting the optimal threshold size. Consideration must be given to the price and liquidity characteristics of different securities.

TOPIC 3: REPORTING TO REGULATORS

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

It is essential for the maintenance of fair, orderly and transparent markets that regulators have a reporting regime for — and a means of accessing — trade information concerning dark liquidity. This is necessary for market surveillance and policy development. Regulators should have the ability to conduct market analysis that is based on a complete data set using metrics that are globally consistent and "execution neutral." To achieve this, there must be uniform reporting requirements, regardless of the execution platform.

Meaningful surveillance of regulated markets is wholly dependent on the data set on which it is based. Market surveillance is necessarily incomplete unless uniform reporting is required for trading in instruments that are admitted on regulated markets or otherwise dependent on instruments that are admitted to trading on regulated markets (e.g. OTC contracts for difference). Allowing inconsistencies in the reporting requirements for different execution platforms in the same or related instruments



creates an opportunity for regulatory arbitrage that may encourage a "race to the bottom" in regulatory standards.

In our view, there is a base level of consistency that is required in the data sets used by different regulators in order to assure harmonization of regulatory measures in both surveillance and policy areas. While the difference in local markets will create distinct regulatory issues and requirements, regulators should aim to harmonize across borders to the extent possible. A lack of cross-border harmonization will potentially undermine the efforts of local regulators if liquidity can be directed to markets opportunistically to avoid certain requirements.

TOPIC 4: INFORMATION AVAILABLE TO MARKET PARTICIPANTS ABOUT DARK POOLS AND DARK ORDERS

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

Chi-X Global supports this principle and believes it is in the best interest of all stakeholders to promote meaningful disclosure on order handling practices, such as order interaction and order priority. Prior to mandating, regulators should ensure there is industry consultation on what parties should receive the information, what information should be distributed and how it should be provided to a broad range of stakeholders, including clients, market participants and market operators.

Market participants should have an understanding of how their orders (dark or lit) are handled and executed on dark or lit venues. Special consideration should also be given to those dark pools that serve institutional investors versus those for which participants must be broker-dealers. Additionally, measures to introduce a mechanism that provides this information to both broker-dealers and their institutional investor clients, many of whom may not be aware of how and where their orders are being transacted, are to be encouraged.

Distribution of appropriate information to educate and inform stakeholders contributes to fair, orderly and transparent markets. Chi-X Global recognizes that lit and dark market operators have proprietary and confidential information regarding the operation of their markets however. Some information – for instance, detailed explanations of the policies and procedures for management of conflicts of interest – may be more appropriately provided to a regulator rather than market participants. By contrast, market participants should be assured by regulators that satisfactory arrangements are in place. Other information, such as detailed explanations of the anti-gaming controls, may be proprietary to the operator. Regulators should be mindful of such competitive concerns prior to mandating disclosure of detailed information.

Chi-X Global also suggests that any request for new information be considered in the context of the existing regulatory and commercial constraints placed on market operators. In some cases the market operator may be subject to an existing obligation to provide the information to satisfy regulations regarding best execution or market misconduct. Finally, regulators should also be mindful of overlapping regulatory requirements prior to mandating additional disclosure.

TOPIC 5: REGULATION OF THE DEVELOPMENT OF DARK POOLS AND DARK ORDERS



Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed

It is essential that regulators continually monitor activity/developments of dark pools and dark orders to best measure their impact on the fair, orderly and transparent operation of financial markets. Standardized reporting conventions for dark liquidity and recognized standard metrics to measure best execution will provide a convention for regulators to assess the contribution that dark liquidity brings to execution quality and its complement to market efficiency. Further, that monitoring should:

- Be conducted through the mechanism of commonly accepted and participant orientated metrics to assure that it has a pragmatic focus on outcomes that facilitate fair, orderly and transparent markets.
- Take into account local and global factors that shape each market, being cognizant of the need to promote a base level of "global" uniformity of monitoring standards. Without this, there is a risk of divergence among jurisdictions as each regulator seeks to address similar regulatory issues supported by different data sets.

It is our view that any proposed regulatory initiatives encompassing action regarding the monitoring or dark pools/dark orders should be subject to a transparent and consultative process that includes a cost/benefit analysis. If this cannot be conducted because of a lack of certainty in data and/or consequences, then any subsequent proposals should be measured and subject to post-review assessment after an interim period with the opportunity for amendment and/or withdrawal based on the results of the assessment.

Conclusion

Recognizing that dark liquidity is a fixture in equity markets, the issue for consideration is what forms of dark liquidity preserve market integrity and price discovery while optimizing benefits for investors. In this regard, any adjustments to the regulatory framework should include reporting and disclosure requirements that will provide regulators with effective tools to accurately identify the level of dark liquidity and effectively monitor its effect and impact. Potential concerns about adverse effects on price discovery and liquidity should be substantiated with empirical data. With meaningful surveillance, regulators should be able to adopt reforms as necessary while mindful of any unintended consequences.

We would like to thank IOSCO for the opportunity to respond to the Consultation Paper	and we	lcome
the opportunity to discuss our submission further with you at your convenience.		

Sincerely,

Chi-X Global

Mr. Werner Bijkerk IOSCO Calle Oquendo 12 28006 Madrid Spain darkliquidity@iosco.org Chris Barnard Germany

30 November 2010

- Public comment on IOSCO's Consultation Report on Issues Raised by Dark Liquidity

Dear Mr. Bijkerk.

Thank you for giving us the opportunity to comment on your Consultation Report "Issues Raised by Dark Liquidity".

I welcome your main principles. We need to act to ensure that dark liquidity pools do not impact the price discovery process in transparent markets. It can be argued that each share traded by dark order reduces the information that could assist the transparent market in determining an accurate, fair price. If the recent high growth in dark orders continues, then at some point the prices quoted on transparent markets may not be efficient or informative, and this could damage the veracity of trading itself, whatever medium is used or wherever it is carried out. On the other hand, dark liquidity pools serve a useful purpose to those wishing to trade large blocks of shares at lower cost without moving the public price as a result of other market participants identifying and trading ahead of their interest.¹

Concerning indications of interest (IOIs), I would argue that IOIs are reasonably used to provide liquidity, aid order matching, and when advertising large-scale liquidity to potential counterparties. However, the information contained in IOIs is not available to the transparent market and potentially impedes the price discovery process here. I would

¹ See Dark Pools Let Big Institutions Trade Quietly, Investor's Business Daily, 2008; Dark Pools of Liquidity, PwC, 2009; The rise of dark pools: Attack of the clones, The Economist, 2009; Consultation Paper 23-404 – Dark Pools, Dark Orders, and Other Developments in Market Structure in Canada, CSA/IIROC, 2009; Regulation of Non-Public Trading Interest, SEC, 2009; Concept Release on Equity Market Structure, SEC, 2010; Micro-structural issues of the European equity markets, CESR, 2010; Shining a light on Dark Pools, the Independent, 2010; Draft Report on Regulation of trading in financial instruments – 'dark pools' etc, European Parliament, 2010; Consultation Paper 145 Australian equity market structure: Proposals, ASIC, 2010.

argue that there is a trade-off between transparency and liquidity here, and it is important to find the right balance between the two. In my opinion traditional IOIs do not create any information asymmetry and are therefore reasonable, whereas actionable IOIs are used primarily to provide information to a selected group of market participants, thus creating the potential for two-tiered access to information, and that this justifies regulatory intervention.

In response to your specific principles I would add the following:

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

I agree with this principle, but regulators should allow for exemptions to the transparency requirements for orders exceeding a minimum size. Such a block exemption rule/limit would maintain the advantages of dark liquidity pools for investors trading large blocks of shares. I would also suggest that actionable IOIs be treated as quotes and should therefore be transparent to the public.

Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

As a general point there is also a need for post-trade transparency for dark pools. I would prefer that all types of exchange should post in real time and disclose the venue in which it traded. However, as a minimum, disclosure should be required on a delayed basis at the end of each day. Even this will promote transparency and provide valuable information about the location of liquidity sources.

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

I agree with this. In fact I would recommend that dark orders should be required to provide price improvement over the National Best Bid/Offer (NBBO) to orders smaller than the block exemption limit (see my response to Principle 1 above).

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

Agreed. This will improve the quality of information about sources of liquidity in markets, and increase public confidence in the integrity of markets.

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

Agreed. This is important in order to maintain confidence in markets.

Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

I agree with this. This is eminently sensible and necessary in order that regulators keep up with market and technological developments.

Yours sincerely

C.R. Barnard

Chris Barnard



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11 February 2011

Re: Public Comment on Issues Raised by Dark Liquidity

Dear Sir, Madam.

Deutsche Bank welcomes the opportunity to comment on the Technical Committee ("Committee") of the International Organization of Securities Commissions ("IOSCO") Consultation Report regarding Issues Raised by Dark Liquidity ("Report"). We support the Committee's review of dark liquidity in equity markets and are pleased to comment on the six principles set forth in the Report.

Dark liquidity is an essential component of a healthy market and encourages the trading of large block orders and illiquid stocks. It offers investors protection from market impact costs by limiting the ability of other participants to identify and trade ahead of the interest.

Dark liquidity has been present in the world's equity markets since markets began. Initially, it took the form of OTC trading and broker internalisation. In 1792, in the US, the principal source of dark liquidity was found on the NYSE trading floor. Following the advent of electronic trading, more efficient and formalised structures were also developed, for example broker crossing systems and dark pools. Robust regulatory frameworks were put in place, which included disclosure requirements, trade reporting, transaction reporting, audit trails and so on. Although the current format of dark pools and dark order types varies across the different regions, they have all developed in response to investor demand. Exchanges in the US have offered electronic dark order types since 2006 and continue to do this because there is genuine investor demand for the service.

Dark liquidity comes in many forms, whether it is a dark pool or dark order types, each electronic mechanism seeks to offer a unique benefit to a specific client need. Broker crossing systems offer investors, such as pension funds and retail aggregators, price improvement on their trades, whilst at the same time ensuring that trading fees and market impact costs are kept to a minimum. In Europe, large institutional investors can trade large block orders quickly and efficiently via the OTC markets, due to deferred reporting requirements.

Without the ability to waive pre-trade transparency under certain conditions, investors will be discouraged from trading large blocks and from taking positions in all but the most liquid of stocks, a trend that could have severe consequences for companies looking to raise capital on our markets. Market transparency is associated with obvious benefits but we urge regulators to apply it with sensitivity. Potential liquidity that is not captured by the market represents a lost opportunity and, in the end, ultimately impacts those companies whose shares are traded.



Pre-trade transparency

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

Response:

Deutsche Bank has many years of experience trading dark liquidity across the key global regions. We agree that price and volume of firm bids and offers should generally be transparent but we are concerned that the wording in Principle 1 fails to emphasise the recognised benefits that dark liquidity brings to equity markets (as described above). As such we would recommend making the following changes:

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider **both the positive and negative** impact of doing so on price discovery, fragmentation, **best execution**, fairness and overall market quality.

We believe that executable dark liquidity¹ will remain a minority market component due to the need for traders to offset their opportunity risk against execution risk. When executing any trade, opportunity risk must be balanced against execution risk (which includes market impact risk)². For orders that are either large or in an illiquid stock, there is a high execution risk compared to opportunity risk, so these trades are generally executed in dark pools. However, the majority of orders entered into equity markets are of average size and are in liquid stocks. Therefore, for these orders, opportunity risk outweighs execution risk and these trades are generally executed in lit order books.

Price discovery

Dark liquidity contributes to price discovery via post-trade reporting³ of price-forming trades¹. The original wording of Principle 1 implies that dark liquidity has a potentially negative effect on price discovery but we have not seen any evidence to support this⁴.

Clearly defined exceptions to pre-trade transparency are needed to facilitate trading and protect investors from the large market impact costs associated with certain trades. In Europe, explicit waivers have been put in place for this purpose and we believe that, when applied consistently and inclusively, these are a useful tool for equity markets. It is important that pre-trade transparency waivers are applied appropriately to different market structures and order types, based on a number of factors, including liquidity.

We believe that dark pool prices should be referenced to a lit order book to ensure efficient

¹ Not all reported OTC trades represent executable order flow that can be interacted with. In the UK, the FSA define four examples, including broker-to-broker trades (give up/give in); broker-to-broker trades (non give up/non give in); other principal trades on behalf of clients that include the reprinting of already executed trades where the price has been guaranteed; other agency and riskless principal trades where the buy/sell are executed at different prices or on different terms and result in two reports to reflect a single trade). TABB Group estimates that in the UK market, executable OTC constitutes only 10% of the total market (*TABB Group, Breaking Down the UK Equity Market, Jan 2011*)

² Kratz et al. Mar 2010

³ Post-trade data also contributes to the price discovery process and further discussion of this is included in our response to Principle 2.

⁴ This statement is echoed in Buti et al. June 2010



price discovery is maintained but we do not see the need to specify that this should be to the lit order book of a primary exchange. In Europe, the tradition of referencing dark pool prices to those offered on the primary exchange has led to one incumbent proposing to charge large fees for this data. This is anti-competitive and as primary exchange market share in Europe has fallen significantly⁵, the primary exchange BBO cannot be considered to represent the total domestic market. Arbitrageurs will quickly remove any differences in price offered by venues.

Fragmentation

When faced with fragmented markets, we recognise that actionable indication of interests (IOIs) can be a useful tool in the search for liquidity. However, in the interests of fairness and overall market quality we ask that those actionable IOIs that do not require human interaction to become a firm quote be treated as firm quotes.

Best execution

Regulatory frameworks should ensure all investors, and in particular retail investors, receive best execution. In the US, the trade-through rule promotes fairness and encourages competition by ensuring that investors' orders are executed at the best price available. In Europe, brokers are required to have an Order Execution Policy⁶, which outlines how client orders will be handled in order to achieve best execution. Although best execution is not a formal requirement in many Asia-Pacific countries, a number have requirements on execution pricing⁷.

Market quality/ fairness

Academic investigation has found that increased dark pool activity tends to be associated with better market quality: lower spreads, higher depth, lower short-term volatility and lower absolute returns⁸. Analysis by *Fong et al.* in Australia, found that the existence of a crossing network had no adverse effect on the liquidity within the limit order book⁹.

We support the notion that public dark pools should promote "fair access" and should not unreasonably prohibit, limit or impose conditions to access.

Markets are constantly evolving and for this reason it is prudent for regulators to undertake regular review of new market developments to fully understand their impact.

Post-trade transparency

Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

Post-trade reporting is a valuable source of "last trade" data and directly contributes to price discovery. When orders are executed over a short duration, real-time reporting is not

⁵ Thomson Reuters, Jan 2011

⁶ Deutsche Bank Order Execution Policy (https://gm.db.com/mifid/)

⁷ For example, in Singapore, trades agreed away from the order book must be reported within 10% of the daily range

⁸ Buti et al. Jun 2010

⁹ Fong et al. 2004



associated with significant information leakage. However, when liquidity is lacking (for example if an order is large or in an illiquid name), orders tend to be executed as a series of smaller orders over a long period of time. In this situation, real-time reporting can alert other market participants to the existence of an order before it is complete, thus allowing participants to trade ahead of the interest.

To minimise information leakage, we believe that post-trade reporting requirements must be linked to such factors as liquidity, venue market share and likely number of participants. For example, publicly reporting the identity of broker internalisation platforms in real time would lead to information leakage due to their narrow business models and small number of users. Likewise, public post-trade reporting of broker IDs would also lead to information leakage. Public trading venues have broader business models and a much larger number of users, thus it would be more difficult to interpret the trading intent of an individual investor.

In Hong Kong, proposals to use the tag 'ALP' to designate a trade matched via a broker internalisation platform are currently being implemented; however there are concerns that if this information is analysed in conjunction with counterparty information present on pre-trade reports, then there will be a risk of information leakage.

For large trades there is a well established trade-off between transparency and liquidity as is recognised by securities regulation across much of the globe. Delayed reporting or aggregate reporting can be useful ways of ensuring that information is made public without the risk of information leakage occurring. We support the joint SIFMA and AFME proposal that the reporting of dark pool trade data reflect the liquidity of the securities concerned. End-of-day public reporting of the identity of dark pool operators executing trades in liquid stocks will achieve regulators' goals while sufficiently protecting dark pool users from adverse market impacts that would result from real-time disclosure of the identity of the dark pool operator in trade reports. We agree with SIFMA and AFME that for less liquid stocks, end-of-day reporting would result in information leakage and therefore end-of-week reporting is required. Reporting requirements should be consistent and take into account existing plans and technology now available for OTC derivative transaction reports (in Europe and US) as well as the SEC's recent proposal for exchanges to develop mandated consolidated audit trail (CAT) reports, together with the myriad of existing regulatory reports, and all other new reporting requirements on the horizon.

If regulators believe that real-time reporting of broker identity is necessary for oversight purposes then we would support disclosure of such information to regulators on the condition that it is treated confidentially.

Priority of transparent orders

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

Response

We agree that transparent liquidity should be the dominant component in equity markets, as lit orders are important for efficient price discovery and orderly markets. However, we are concerned that the wording in Principle 3 does not recognise the benefits associated with dark liquidity.

We believe that in a hybrid order book, transparent orders should have priority over dark orders at the same price. However, in non-hybrid books, lit and dark orders should have equal priority and execution of all orders (dark or lit) should be driven by best execution. In the US



and Canada, the "trade-through" rule has helped ensure that those who display superior prices are matched before those at inferior prices. A "trade-at" rule would reverse the benefits that Regulation ATS and Regulation NMS have brought to the US market, such as increased liquidity and tighter spreads. The rule would impair the ability for large orders to be executed without market impact, would negatively impact trading costs through the reduction of competition and would further impact institutional investors. In Europe, brokers are bound by their Order Execution Policy to handle client orders in accordance with agreed terms in order to achieve best execution ¹⁰.

Reporting to regulators

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

Response:

We fully support Principle 4. Regulators should have access to accurate, timely and detailed information regarding the trading of dark orders in order to maintain effective oversight. However, information of this nature is sensitive and we would request that it is treated confidentially.

Information available to market participants about dark pools and dark orders

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

Response:

We fully support Principle 5. Participants should be provided with sufficient information to understand the manner in which their orders are prioritised and executed. We believe that operators of dark pools or trading venues where dark orders occur should provide all members with detailed explanation of how trading occurs, including a description of priority, any order interaction between lit and dark liquidity and use of IOIs.

Regulation of the development of dark pools and dark orders

Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

Response:

We fully support Principle 6. Markets evolve constantly, driven in large by technological advancements and falling costs. For this reason it is prudent for regulators to undertake regular reviews of market developments to ascertain the impact of the regulatory framework on the wider market and whether changes in the regulatory environment and surveillance are required. The use of technology in dark and lit order books facilitates this process and allows for a robust surveillance system, ensuring that audit trails and records are maintained.

¹⁰ Deutsche Bank Order Execution Policy (https://gm.db.com/mifid/)



Deutsche Bank appreciates the opportunity to submit our views for your consideration. Please do not hesitate to contact us should you have any questions.

Yours sincerely,

Daniel Trinder



Deutsche Börse Group's Response to

Consultation Report of the Technical Committee of the IOSCO:

'Issues Raised by Dark Liquidity'

Frankfurt / Main, January 2011

Introductory Remarks

Deutsche Börse Group (DBG) welcomes the opportunity to comment on the consultation report on 'Issues Raised by Dark Liquidity' published by IOSCO.

In general, transparent markets are not easy to establish. Every individual likes to know the trading intentions of others and wants to know where the current market price is. But nobody likes to display his own order to others, due to concern of a potential adverse price movement. The logical outcome without regulatory intervention would be opaque markets. Further, competition in securities markets, while generally being welcomed, inevitably leads to liquidity fragmentation. However, price formation in fragmented markets can work if markets are transparent in the first place and availability of data is ensured. Therefore, the regulator must ensure transparency on fragmented markets to protect a functioning price discovery mechanism. The alternative would be that individual choice drives order execution to dark venues. An increased usage of dark pools can be observed in the European Union following the implementation of the Market in Financial Instruments Directive (MiFID).

Therefore, the DBG welcomes the IOSCO to establish principles that address regulatory concerns on dark liquidity. It is important to raise the issue of dark liquidity now as in context of the financial crisis the lack of transparency has reinforced malfunctioning of OTC derivatives markets as an example. Moreover, it has to be insured that retail order flow is not transferred to dark venues. Therefore we suggest a minimum order size for dark pools. That would also be in line with the original purpose to provide liquidity for large orders without market impact.

We elaborate on principles raised in the consultation report in more detail below.

Detailed Remarks on IOSCO Principles

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

DBG strongly supports Principle 1 on pre-trade transparency. Prices and volumes of orders should generally be transparent to the public. A significant volume executed without pre-trade transparency decreases market quality and contributes to asymmetric information of market participants and thus creates two classes of investors. Dark pools or dark orders should only be used in case significant market impact is to be expected.

Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

DBG strongly supports improvement of transparency on trades executed on dark pools. Apart from the need to strengthen pre-trade transparency, a more granular post-trade transparency is needed. DBG sees the most pressing issues around dark pools that are not captured by the legal framework and which essentially operate as OTC trading venues. In fact, the quality of OTC post-trade data is weak in the EU compared to Regulated Markets' and multilateral trading facilities' data. There are currently no clear and uniform rules and standards for the OTC market, which definitely is one major reason for the lack of data quality in this space. The lack of clear EU rules regarding which trades have to be reported to which facility by whom creates uncertainty amongst market participants which transforms into either non-, or under-, or over-reporting of OTC trades. This is even worse in case of cross-border trading, when two different regulatory territories are involved, each with different regulatory transparency requirements. Clearly, in order to improve OTC post-trade reporting this issue needs to be solved as quickly as possible. Ideally, detailed and uniform trade reporting requirements will have to be developed and implemented on a pan-European level. Hence, elaboration of standards for the publication of post-trade data would be a major improvement. In order to improve transparency in particular in relation to dark pools, DBG would deem it sensible to make available the Execution Venue Id (other then the acronym OTC) within the post-trade publication. This would support verification of best execution on an ex-post basis as well.

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

DBG strongly supports the prioritization of transparent orders.

However, it is very important to analyze that issue not only in intra-venue level but also on an inter-venue level. Some setups currently available on the market allow market operators (MO) to offer trading in an open limit order book (OB) and a midpoint dark pool (MDP) at the same time in the same instrument. Although the internal linkage of such settings is formally prohibited, these markets seem to be connected via an external link that is operated by the very same MO.

Thus, the MO controls both the setup and operation of the OB, the MDP and the Smart Order Routing-link connecting them. This setup allows MO to link the two markets in an extremely efficient manner, which comes very close to a seamless integration of its lit and dark books. By design, this efficiency can probably never be achieved by any third-party Smart Order Routing link to the two books operated by MO.¹

The resulting issues of such a setup are the known issues of any integration of lit and dark orders within one book: The systematic disadvantage for displayed orders; as 1) hidden orders gain priority over displayed orders and 2) the hidden orders free-ride on the informational content of the visible orders (as they form the basis for the midpoint).

These issues can be healed by separating the operator of the link from the market operator (heals the seamless but undesired integration of lit and dark markets); and by increasing the minimum order size for the Reference Price waiver (heals the disadvantage to Large-in-Scale Hidden Orders from the open order book).

DBG fully understands the need of market participants to seek for liquidity in dark pools

Traders can instruct the MO to send every order first to the MDP, and in case of non-execution to route it forward to the OB. Since the link between two markets is extremely efficient, the additional latency – compared to an order that is routed directly to the OB – is probably insignificant. The result of such a setup is the systematic encouragement of traders to route their orders to the MDP, as the chance of trading at the midpoint instead of the best bid or best ask is quite considerable.

The problem now arises with the orders resting in the MDP waiting for execution. The resting orders (which might be extremely small in size) will have always priority over any order in the OB. In a way the resting order in the MDP behaves like a dark order resting in the order book at the midpoint. But no market participant can step in front of that order using any transparent order type.

¹ This setup allows trading participants the following trading strategies:

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before addressing lit markets. This is at the full discretion of the trader. However, integrating dark pools and transparent markets so seamlessly that they virtually become one market place, devalues the attractiveness of transparent orders and is a risk for market integrity. Therefore it is very important to analyze the priority of transparent orders over dark orders not only on a venue level but also across different venues and their specific ways of interaction.

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

DBG strongly supports a reporting regime on trade information on dark pools and dark orders.

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

DBG strongly supports a requirement on dark pools to lay down in written for the purpose of transparency towards customers and towards regulators how orders are handled and executed. Transparent markets in Europe, i.e. regulated markets and multilateral trading facilities, that offer dark trading based on waivers from pre-trade transparency, already do so. They are obliged by law to operate post trade transparent and non-discretionary execution systems that ensure fair and orderly trading.

Further, the regulated markets and multilateral trading facilities must apply for a waiver from pre-trade transparency which needs to be authorised by competent authorities. So market participants know which dark trading is exactly taking place according to waivers on regulated markets and multilateral trading facilities. However, dark trades executed in broker crossing networks are not significantly explained neither to market participants nor to regulators. Broker crossing networks operate the same business as systemic internalisers (in case of bilateral trading) or as multilateral trading facilities (in case of multilateral trading) and should therefore provide the same level of transparency. The existing reporting on dark pools does not provide the level of information granularity as from regulated markets and multilateral trading facilities.

Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

DBG supports the monitoring of dark pools and dark orders. The regulators should ensure that the market share of dark pools is not endangering price formation processes.

For further information please contact Market Policy & European Public Affairs ++49 (0) 69 211 -13980



Mr. Werner Bijkerk Senior Policy Advisor International Organization of Securities Commissions (IOSCO) Calle Oquendo 12 28006 Madrid Spain

Ref. 11-4014 8 February 2011

Re: Public comment on Issues raised by Dark Liquidity

Dear Mr. Bijkerk,

EFAMA is the representative association for the European investment management industry. It represents through its 26 member associations and 48 corporate members approximately EUR 13.5 trillion in assets under management, of which EUR 7.7 trillion was managed by approximately 53,000 funds at the end of September 2010. Just under 36,000 of these funds were UCITS (Undertakings for Collective Investments in Transferable Securities) funds.

We welcome the opportunity to reply to IOSCO's Consultation Report regarding 'Issues Raised by Dark Liquidity', issued last October. The subject is very topical in view of the discussions at European level on the MiFID Review.

Regarding the IOSCO Report we have the following comments:

- We thank the IOSCO Technical Committee for dealing with Dark Liquidity, an issue which needs to be assessed from a regulatory perspective due to the development of dark pools and dark orders.
- We approve and support the 6 Principles proposed by IOSCO, which provide a path towards a minimum regulatory convergence on this topic at worldwide level.
- Improving the transparency of Dark Pools and Dark Orders is a general Principle to be followed, at least towards regulators and to a large extent towards market participants.

We hope our comments have been of assistance and remain at your disposal should you have any questions.

Kind regards,

Peter De Proft Director General



Richard G. Ketchum Chairman and Chief Executive Officer

28 January 2011

Mr. Werner Bijkerk Senior Policy Advisor International Organization of Securities Commissions Calle Oquendo 12 28006 Madrid Spain

Re: Public Comment on Issues Raised by Dark Liquidity

Dear Mr. Bijkerk:

On October 27, 2010, the International Organization of Securities Commissions (IOSCO) solicited comment on a consultation report, entitled *Issues Raised by Dark Liquidity*, ("IOSCO Report"), drafted by the Technical Committee's Standing Committee on the Regulation of Secondary Markets (TCSC2). The IOSCO Report reflects feedback from surveys conducted by the TCSC2 of regulators, trading venue operators, and users of dark pools/dark liquidity. The survey process sought the parties' views on five areas of regulatory policy raised by the proliferation of dark pools/dark liquidity in competition with lit venues characterized by pre-trade transparency for open orders. The specific issues highlighted for comment were: (1) transparency and price discovery; (2) fragmentation of liquidity across multiple venues trading the same securities; (3) knowledge of trading intentions; (4) fair access; and (5) the ability of regulators to assess actual trading volume in dark pools. Based on inputs received, the IOSCO Report proposes six draft principles to guide regulators' future actions in dealing with dark liquidity facilities generally.

The Financial Industry Regulatory Authority (FINRA) welcomes the opportunity to offer its comments on certain elements of the IOSCO Report that correspond to our institutional experience and expertise. By way of background, FINRA is the largest self-regulatory organization (SRO) in the U.S. Although not a market operator, FINRA now provides regulatory services to 17 equities and options markets operated by 11 U.S. national securities exchanges. In particular, , the services include, among others, providing market surveillance to the five U.S. equities and options markets operated by NYSE-Euronext and the five U.S. equities and options exchanges

¹ The IOSCO Report defines *dark pool* as any pool of liquidity that can be accessed electronically and provides no pretrade transparency regarding the orders resident in the pool. A dark pool may operate in several forms including as an alternative trading system (ATS), multilateral trading facility (MTF), a dealer crossing system, or a facility of a transparent market. The IOSCO Report defines *dark order* as an electronic order for which there is no pre-trade transparency.

² The mandate for the IOSCO Report covers several specific issues relating to dark liquidity as it affects trading in equity securities only. It specifically excludes, however, consideration of certain issues such as: (a) voice brokering; (b) the regulation of intermediaries; (c) satisfaction of best-execution requirements via the interaction of dark and transparent orders; and (d) the consequences of increased use of reserve or *iceberg* orders that include displayed and non-displayed parts.

operated by NASDAQ OMX. As a result, FINRA's surveillance responsibilities encompass approximately 80% of the trading volume in the U.S. equity markets and 35% of the U.S. options markets.

FINRA is also responsible for surveillance of the U.S. over-the-counter (OTC) markets for corporate equities and bonds. This market segment includes alternative trading systems (ATSs) operated by registered broker-dealers subject to FINRA's regulatory jurisdiction. The universe of ATSs operating in the OTC market includes dark pools that compete with lit exchanges for order flow in several thousand listed equities classified as National Market System (NMS) securities under the U.S. regulatory framework.

Accordingly, FINRA has a significant interest in IOSCO's work in developing principles to guide the future regulation of dark pools generally. Because FINRA does not operate any order matching facility, we will restrict our comments to those principles that most directly impact investor protection and/or market integrity -- FINRA's core regulatory objectives.

I. Post Trade Transparency: Principle 2—Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

Principle 2 and the related discussion in the IOSCO Report note that differences exist in some jurisdictions regarding the treatment of post-trade data originated from dark pools versus lit markets. However, as the Report indicates, the predominant rule across the globe is that most jurisdictions hold dark pools to the same post-trade transparency requirements as lit venues, in terms of the timing and basic elements comprising a real-time trade report. The most notable exception, however, is dissemination of the specific dark pool upon which a trade is executed.

The discussion supporting Principle 2 explains that accurate and timely post-trade data such as time, security identifier, price and volume from all reporting venues can assist market participants in discovering the best available price for a security, thereby assisting participants in pricing prospective orders.³ As the discussion makes clear, with the addition of a market center identifier for individual dark pools, such information could alert market participants where to route a pending order for the best available price. In this way, the linking of dark pool identifiers to the corresponding trade reports might mitigate the loss of pre-trade transparency inherent in dark facilities.

The emergence of dark pools and other alternative trading venues reflects advanced technology applied to support a variety of trading strategies among different classes of market participants. This environment offers a number of positive benefits, as summarized in Chapter 2.B of the IOSCO Report. The proliferation of electronic venues, however, should not compromise the integrity and completeness of the post-trade data routinely collected and disseminated to the public. In this regard, FINRA supports the broad principle of holding dark and lit venues to the same standards in terms of time, security identifier, price and volume information disseminated

³ As used here and in the IOSCO Report, *market participant* includes intermediaries and investors.

in real-time for individual equities transactions (without affixing a market identifier – more on this point below).

Finally, we believe that any adjustment to the post-trade transparency rules that could distort competition or undercut the legitimate benefits offered by alternative venues—dark or lit--should be weighed objectively in terms of costs/benefits to all market participants. This appears to be the key element expressed by Principle 2 and the underlying discussion on market identifiers.

Finally, for comparison purposes, the present U.S. standard for identifying a market center requires insertion and dissemination of a generic OTC Designation for trade reports originated by ATSs, whether dark or lit. Exchange identifiers do accompany real-time reports of trades executed on the national securities exchanges. However, it is important to note that the U.S. Securities and Exchange Commission is currently deliberating on a proposed rule change that could modify this standard.⁴

II. Reporting to Regulators: Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

The core issue addressed by Principle 4 is that regulators need accurate and timely information, reported in compliance with unified content standards, to assess the impact of competition for order flow between dark and lit venues. Principle 4 reflects input from surveys conducted by TCSC2 and underscores regulators' need for certain minimal elements of reported data to be used for surveillance and analytic purposes, e.g., symbol, price, volume, identities of buy/sell side parties, and venue identifiers. The IOSCO Report acknowledges that regulators generally have ample authority to request such information, but concerns had been raised about the quality and consistency of transaction data that is supplied, in response to a special request, by multiple venues trading a common group of equity securities.

While we support the underlying premises of Principle 4, FINRA also believes that Principle 4's focus on access to data should be viewed from a much broader regulatory perspective than what is necessary to assess order handling and transaction details attributable to dark and lit venues. Based on our experience in market surveillance, we would urge IOSCO to expand Principle 4 to embody access to full pre and post- trade data transparency data for the relevant market regulator(s). This would mean the routine gathering of a wide range of data, in electronic form, to produce consolidated order and transaction audit trails, for all market venues that trade a defined subset of securities in a particular jurisdiction. Most of the data would be available only to the regulators (including market place identifiers), but it would be derived from data captured and processed by market operators and/or direct market participants. This regulatory data would drive electronic surveillance and alert functions, and provide historical data on order routing and trading patterns, linked to particular market venues and participants, that could support policy studies such as the one envisioned in Principle 4.

Given FINRA's experience in conducting market surveillance for several U.S. equity markets, we believe that market oversight requirements must adapt to the fragmented market structure used

⁴ See SEC Release No. 34-60977 (November 13, 2009), File No.S7-27-09, Regulation of Non-Public Trading Interest, Proposed Rules and Amendment to Joint Industry Plans.

by diverse market participants to route and execute orders for proprietary as well as client accounts. This environment already exists in many countries as evident from the survey responses gathered in preparing the IOSCO Report. Accordingly, FINRA would recommend that a more expansive approach to regulatory transparency (with appropriate rule changes) be guided by three overarching objectives:

- (1) To provide a holistic approach whereby regulators can monitor and detect problematic activity across markets and products (i.e., cash, equity, debt and derivatives), and not simply within each market or market segment.
- (2) To guarantee a sufficient level of detail and aggregation of audit trail data across markets/products so that regulators can reliably identify activity such as direct market access, high frequency trading, and algorithmic trading, among others; such market data can be used to enhance a regulator's surveillance systems to detect market manipulation and other abusive activities; and
- (3) To ensure that audit trail data is transparent so that market participants' trading and order entry/cancellation practices are discernable to regulators by virtue of assigning a unique market participant identifier (MPID) to financial intermediaries and major market participants such as hedge funds, proprietary trading firms, or investment advisors to large investment funds; essentially, the unique MPID would eliminate opportunities available today to for participants to use multiple MPIDs, depending on the market venue or access arrangement used by the participant, among other variables.

Clearly, the foregoing are ambitious objectives, but, in our view, necessary to deliver more effective market oversight across the range of public trading venues now operating in most countries. Moreover, reliable pre and post-trade audit trail data can be a valuable resource for conducting policy studies and to assess the impact of new regulations. Accordingly, FINRA recommends that IOSCO consider, in the context of Principle 4, a broader perspective on what constitutes a sufficient level of market data transparency to regulators.

* * * * *

FINRA appreciates the opportunity to share relevant insights gained from its experience in oversight of exchange and OTC markets in equity securities. Should you have any questions about this letter, please feel free to contact me.

Sincerely,

Richard G. Ketchum

Feld Kelok



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Mr. Werner Bijkerk Senior Policy Advisor International Organization of Securities Commissions (IOSCO) c/ Oquendo 12 28006 Madrid Spain

Email: darkliquidity@iosco.org

10th February 2011

Dear Mr Bijkerk,

Public Comment on Issues Raised by Dark Liquidity

General remarks

- 1. The International Banking Federation (IBFed) welcomes IOSCO's reflections on the issues raised by the trading of equities in dark pools and the availability of dark orders on traditional equity exchanges. The Federation notes, however, that IOSCO's reflections do not encompass dark liquidity issues in a broader trading context (e.g. for instruments other that equities, off-exchange trading, etc.) and, as a consequence, IOSCO principles should be primarily considered within the remit of transparent markets. Indeed, as admitted by IOSCO, "the implementation of the proposed principles may vary according to the type of trading and platform".
- 2. The Federation concurs with IOSCO's main lines of thought with regard to dark liquidity. In particular, the Federation:
 - agrees with IOSCO that, conceptually, a distinction needs be drawn between dark pools (i.e. pools of liquidity that provide no pre-trade transparency) and dark orders (i.e. orders for which there is no pre-trade transparency, notwithstanding the level of transparency of the venue where the order is received).
 - agrees with IOSCO that both dark pools and dark orders are not a new market feature
 and that both have existed in levels that have not been subject to proper
 measurement for a good reason, notably, to preserve an adequate level of anonymity
 for the quote and to execute orders minimising their market impact. Importantly, dark
 pools and dark orders meet a demand in the market.

- agrees with IOSCO that dark pools and dark orders are currently more prominent due to automation and the use of electronic trading. The increasing notability of dark liquidity is, therefore, a consequence of the advent of technology and broad market innovation.
- 3. The Federation also shares IOSCO's view that the use of dark pools and dark orders may eventually bear upon the functioning of transparent markets, notably with regard to their ability to allow for adequate securitites' price discovery. Such a potential impact may need be addressed from a regulatory standpoint. With this in mind, the Federation welcomes IOSCO's approach to assessing the issues, raised by dark liquidity, which fully take into account IOSCO's established principles and previous conclusions. Such consistent, thorough, and systematic analysis has resulted in an informed and balanced draft report. The Federation commends IOSCO and its staff for this effort.

Detailed remarks

- 4. As a preliminary remark, the Federation wishes to note that the true impact of dark liquidity on transparent markets can only be assessed on the basis of a proper, comprehensive measurement on the use of dark pools and dark orders. The Federation believes that, despite some of the estimates provided by IOSCO on a best effort basis, it is currently not possible to assess to what extent dark pools and dark orders are used in traditional equity markets. The Federation considers that this lack of information should necessarily inform any possible regulatory action, the more so, as dark liquidity exists for a good reason and is a structural feature of transparent markets.
- 5. In connection to **Principle 1** on pre-trade transparency, the Federation welcomes the fact that, despite the noted preference for transparent bids and offers, IOSCO recognises that different needs in different market segments may call for different levels of pre-trade transparency. The Federation believes that IOSCO should, therefore, stick to its hinted intention of refraining from recommending pre-trade transparency for all types of trading venues and orders.
- 6. With regard to **Principle 2** on post-trade transparency, the Federation agrees that all information regarding trades should be made transparent. In this respect, the Federation invites IOSCO to recommend that specific information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets is also disclosed to the public. With regard to operations carried out in discretionary crossing systems, the Federation considers, however, that trade information should be made public in an aggregated way, at the end of each trading day. In connection to dark venue, identification, whilst the Federation agrees that such issue should primarily be left to the cost-and-benefit analysis and final discretion of regulators, it also notes that a possible compromise solution could be for investment firms to add a generic venue identifier to post-trade transparency reports for all transactions executed on such venues.
- 7. In connection to **Principle 3** on priority of transparent orders, the Federation notes that IOSCO is cooperative / willing to help in taking steps to support the use of transparent orders and that a measure of support could be for transparent orders to have priority over dark orders at the same price within a trading venue. With this in mind, the Federation notes that most transparent markets (e.g. exchanges, multi-trading facilities (MTFs), and electronic crossing networks (ECNs) already apply price-visibility-time-priority and that, to an extent, this stance may have spawned the creation of discrete dark books, isolated

from the lit orders books. Furthermore, the Federation considers that prescribing priority of transparent orders in transparent markets may lack impact as most dark liquidity today resides in discrete trading venues. In addition, the Federation recalls that dark orders serve, in fact, a specific, clearly identified, and more importantly, legitimate market demand: to conduct a trade minimising market impact. It should not be the objective of the regulatory framework to prevent the successful completion of legitimate transactions.

- 8. With regard to **Principle 4** on reporting to regulators, the Federation is thoroughly supportive of IOSCO's recommendation that regulators furnish themselves with a reporting regime and/or means of accessing trading information in connection to dark liquidity. The Federation would like to emphasize, however, the need to ensure that: (i) reporting burdens are kept to the lowest possible minimum; and (ii) that global, standard reporting formats are developed and used only where harmonisation is feasible, cost-effective, and contributes to monitoring of potential market abuse.
- 9. In connection with/to **Principle 5** on order handling information to the public, the Federation again supports IOSCO's recommendations. With IOSCO, the Federation considers it crucial that market participants understand the way in which dark pools and dark order in transparent markets operate so that they feel confident about those markets, and their level of integrity.
- 10. Finally, the Federation also agrees with IOSCO on the need for regulators to "monitor the development of dark pools and dark orders (...) to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets" (Principle 6). The Federation notes, however, that regulators will find it difficult to establish the level of liquidity that should be displayed on transparent markets so as not to impact the price discovery process negatively. As a result, any corrective measures on dark liquidity levels should best be taken with a degree of caution, thereby ensuring that they are not too difficult to reverse (i.e. by using technical standards as opposed to legislation/ regulation).

Conclusion

11. The Federation broadly shares the draft IOSCO principles on the issues raised by dark liquidity and commends IOSCO on the high-quality analytical draft report produced, both from a content and a methodological perspective. The Federation invites IOSCO to recommend that specific information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets. is also disclosed to the public. With regard to operations carried out in discretionary crossing system, the Federation considers, however, that trade information should be made public in an aggregated way, at the end of each day. In connection to dark venue, identification, whilst the Federation agrees that such issue should primarily be left to the cost-and-benefit analysis and final discretion of regulators, it also notes that a possible compromise solution could be for investment firms to add a generic venue identifier to post-trade transparency reports for all transactions executed on such venues. With regard to priority of transparent orders, the Federation notes that most transparent markets (e.g. exchanges, MTFs, and ECNs) already apply the priority of price-visibility-time and that, to an extent, this stance may have spawned the creation of discrete dark books, isolated from the lit orders books. Furthermore, the Federation considers that prescribing priority of transparent orders in transparent markets may lack impact as most dark liquidity today resides in discrete trading venues.

Yours sincerely,

Sally Scutt

Managing Director

IBFed

Pierre de Lauzun

Chairman

IBFed Financial Markets Working Group



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February 11, 2011

Mr. Werner Bijkerk Senior Policy Advisor International Organization of Securities Commissions Calle Oquendo 12 28006 Madrid Spain

Re: Public Comment on Issues Raised by Dark Liquidity

Dear Mr. Bijkerk:

The Investment Company Institute ("ICI") supports the International Organization of Securities Commissions' ("IOSCO") review of issues raised by dark liquidity. The consultation report ("Consultation") issued by the Technical Committee's Standing Committee on Secondary Markets ("Technical Committee") raises a number of issues of importance to ICI members.

The ICI is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds ("ETFs"), and unit investment trusts ("UITs"). The structure of the global securities markets has a significant impact on ICI members, who are investors of over \$12 trillion of assets. We are institutional investors, but invest on behalf of over 90 million individual shareholders. U.S. registered investment companies and their shareholders therefore have a strong interest in ensuring that the global financial markets are highly competitive, transparent and efficient, and that the regulatory structure that governs the financial markets encourages, rather than impedes, liquidity, transparency, and price discovery. Consistent with these goals, we have strongly

¹ ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers.

² For more information on the U.S. registered investment company industry, *see* 2010 Investment Company Institute Fact Book at <u>www.icifactbook.org</u>.

³ The issues discussed in the Consultation impact all U.S. registered investment companies, including mutual funds, closedend funds, and ETFs. For purposes of this letter, we refer to U.S. registered investment companies as "funds."

Mr. Werner Bijkerk February 11, 2011 Page 2 of 12

supported efforts to address issues that may impact the fair and orderly operation of the financial markets and investor confidence in those markets and have long advocated for appropriate regulatory changes.⁴

The issues surrounding the trading of securities by funds and other institutional investors, including those involving dark liquidity, are no longer purely a domestic matter. Many funds utilize intricately linked global trading desks and must be concerned not only about the regulation and structure of the financial markets in the United States but also in other jurisdictions in which they trade. ICI therefore offers its assistance to the Technical Committee as it continues to examine the issues raised by the Consultation and their impact on the financial markets.

Our recommendations on the issues raised in the Consultation follow below.

I. Summary of Recommendations

- Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.
 - We generally support increasing pre-trade transparency of information about dark liquidity but urge regulators to examine any unintended consequences that may arise as a result of new requirements, particularly the impact on large orders executed by funds.
 - We strongly support exceptions provided to pre-trade transparency for large orders and caution against drafting any such exceptions too narrowly; we believe the benefits of exceptions outweigh any associated costs to the markets.
 - We support the principle of treating actionable indications of interest as firm public quotes that should be displayed.
- Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the

⁴ ICI has filed several letters directly addressing issues relating to dark liquidity. *See, e.g.*, Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated February 22, 2010; available at http://www.ici.org/pdf/24142.pdf (SEC Non-Public Trading Interest Proposal); Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated April 21, 2010; available at http://www.ici.org/pdf/24266.pdf (SEC Concept Release on Equity Market Structure); and Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Directorate General, European Commission, dated February 2, 2011; available at http://www.ici.org/pdf/24946.pdf (European Commission Review of MiFID). For a comprehensive list of, and links to, ICI's key comment letters and statements on trading and market structure issues, *see* Appendix A.

Mr. Werner Bijkerk February 11, 2011 Page 3 of 12

positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

- We generally support increasing post-trade transparency of information about dark liquidity but believe that exceptions to facilitate and ensure the efficient execution of large orders are critical.
- ➤ We do not support real-time, post-trade transparency of the identity of individual dark pools but do support such disclosure on a delayed basis (*i.e.*, at the end of the trading day, on a stock-by-stock basis).
- Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.
 - ➤ We strongly support efforts to provide incentives for market participants to use transparent orders and believe the time is ripe for regulators to examine the impact of certain undisplayed liquidity on price discovery.
 - We believe it is imperative that venues trading dark liquidity remain available to funds and that regulations overseeing these venues facilitate their continued use; we are concerned by suggestions that rather than incentivizing the use of transparent orders, regulators may choose to have only limited exceptions to pre-trade transparency.
 - We believe that dark liquidity in the form of broker-dealer internalized order flow should be examined and that further action should be taken to ensure that internalized orders receive best execution.
- Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.
 - We believe it is important that regulators have access to accurate, timely and detailed information regarding dark liquidity.
- Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.
 - ➤ We strongly support suggestions that dark pools or transparent markets offering dark orders ensure that market participants are provided with detailed explanations of information about how orders are handled and executed.

- Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.
 - We strongly support regulators having adequate arrangements in place to continue to examine the changes to market structure and to identify emerging issues in a timely fashion.
 - We are concerned about the breadth of the statement in the Consultation that a review by regulators of developments in this area could lead to a reduction of dark liquidity.

II. Funds Use of Dark Liquidity

As the Consultation notes, the global equity market structure has undergone significant changes over the past several years. Clearly, a primary driver and enabler of these changes has been the continual evolution of technologies for generating, routing and executing orders and related improvements to the speed, capacity and sophistication of the trading functions available to investors. Funds rely heavily on technology for the efficient execution of their trades.

Despite the improvements to the structure of the markets, challenges for funds remain when trading - posted liquidity and average execution size is lower, while the difficulty of trading large blocks of stock has increased. In many respects, these challenges have helped spur the expanded use of dark liquidity and the development of so-called "dark pools." 5

The Consultation notes a number of reasons why dark pools may be used by market participants including: to avoid information leakage; to minimize market impact costs; to facilitate the execution of large blocks; to ensure better control of an order; to protect proprietary trading information; to avoid algorithms or programs that seek to identify or "sniff" out dark orders used in transparent markets; to take advantage of the possibility of price improvement; and to minimize transaction costs.

All of these are examples of the benefits of dark liquidity to funds. Funds have long been significant users of dark liquidity and the trading venues that provide such liquidity. Most significantly, these venues provide a mechanism for transactions to interact without displaying the full scale of a fund's trading interest. For ICI members that frequently must execute large orders, these benefits are particularly valuable because it lessens the cost of implementing trading ideas and mitigates the risk of

⁵ We believe it is unfortunate that such pejorative terms as "dark liquidity" and "dark pools" have now become ingrained in the terminology used by the financial markets and policymakers to describe a type of liquidity and trading venue that has brought certain benefits, as discussed below, to all kinds of market participants, including funds and their shareholders. We therefore are reluctant to use these terms when discussing issues surrounding this part of the market structure and urge that alternative terms be established.

Mr. Werner Bijkerk February 11, 2011 Page 5 of 12

information leakage. These venues also allow funds to avoid transacting with market participants who seek to profit from the impact of the public display of large orders to the detriment of funds and their shareholders.

ICI recognizes that while venues providing dark liquidity bring certain benefits to funds, there are concerns about the use of this practice, particularly the impact on the price discovery process, the impact of potential fragmentation on information and liquidity searches, and the impact on market integrity due to possible differences in access to markets and information. We therefore understand the Technical Committee's desire to examine dark liquidity and the use of dark pools. Nevertheless, the importance of funds being able to trade efficiently in large size through dark pools cannot be discounted. As we have stated in several letters to the U.S. Securities and Exchange Commission ("SEC"),6 the confidentiality of information regarding fund trades is of significant importance to ICI members. Any premature or improper disclosure of this information can lead to frontrunning of a fund's trades, adversely impacting the price of the stock that the fund is buying or selling.

We also understand that questions have been raised regarding the order execution quality provided to funds and the associated costs for funds of executing orders in dark pools as compared to the displayed, or "lit," markets. In general, ICI believes that the quality of execution provided by dark pools is very good and is no more costly (and may in certain situations be less costly) than traditional markets. However, as with any type of trading venue, execution results will vary depending on a number of factors such as the specific business model, the type of security the fund is seeking to trade, and overall market conditions at the time of the trade. It also is important to note that given the number of different types of facilities providing dark liquidity, it is difficult to provide an all encompassing view about the order execution quality provided by these types of venues.

III. Draft Principles to Address Regulatory Concerns

ICI supports the goals of the Technical Committee's draft principles to address regulatory concerns. As the Consultation notes, the principles are designed to assist regulatory authorities when dealing with issues concerning dark liquidity.⁷ We recommend, however, that regulatory authorities take a measured approach to any responses they feel appropriate and necessary to address concerns regarding dark liquidity. If regulations are too restrictive, they may unintentionally limit the use of evolving market practices and technological developments in a way that impedes funds' use of new and innovative trading venues such as dark pools.

⁶ See, e.g., Letters from Paul Schott Stevens, President, Investment Company Institute, to Christopher Cox, Chairman, Securities and Exchange Commission, dated September 14, 2005, August 29, 2006, and September 19, 2008.

⁷ Specifically, the Consultation states that the principles are designed to: minimize the adverse impact of the increased use of dark pools and dark orders in transparent markets on the price discovery process; mitigate the effect of any potential fragmentation of information and liquidity; help to ensure that regulators have access to adequate information to monitor the use of dark pools and dark orders; help to ensure that investors have sufficient information so that they are able to understand the manner in which orders will be handled and executed; and increase the monitoring of dark orders and dark pools in order to facilitate an appropriate regulatory response.

Mr. Werner Bijkerk February 11, 2011 Page 6 of 12

In addition, if regulations are too onerous or costly for certain market participants, they may determine to not offer certain products or services to investors. Similarly, the cost of trading may increase as market participants shift the burden of compliance with new requirements to investors. We therefore urge regulatory authorities to carefully balance these potential costs with the benefits any new regulations would provide to investors.

It also will be important for regulatory authorities to consider the varying business models and trading mechanisms of dark pools. For example, some dark pools in the United States offer specific size discovery mechanisms that are critical for funds in the anonymous execution of large-sized orders. Others operate in a manner more akin to broker-dealer trading venues; we believe these latter systems arguably should be treated differently from other dark pools for purposes of regulation.

Topic 1 - Transparency to Market Participants and Issuers

The first two draft principles address increasing transparency regarding dark liquidity. ICI shares the views of the Technical Committee of the importance of pre- and post-trade transparency in the financial markets. As investors, transparency of market information is vital to making informed investment decisions; a robust transparency regime provides investors with access to information about current trading opportunities, facilitates price formation and assists firms in providing best execution to their clients.

At the same time, we believe there are limits to the benefits of increased transparency in certain situations. We therefore urge regulatory authorities to closely examine the potential unintended consequences of increasing transparency of certain trade information, particularly the impact of the premature disclosure of critical information about fund orders in dark pools.

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

Exceptions from Pre-Trade Transparency for Large Orders

We are pleased that the Technical Committee recognizes that large orders may incur market impact costs if subject to full pre-trade transparency obligations and that it may be appropriate to have different levels of pre-trade transparency apply to different market structures or different order types.

ICI strongly supports the exceptions provided in various jurisdictions to pre-trade transparency for large orders. These exceptions are critical to funds and other institutional investors. In responding to the SEC's proposal on undisplayed liquidity, ICI expressed support for the concept of an exception from the transparency requirements for large-sized trades or quotes.⁸ At the same time, we cautioned

 $^{^8}$ See ICI Letter on SEC Non-Public Trading Interest Proposal, supra note 4.

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against drafting any such exceptions too narrowly.9

ICI also agrees with the principle that where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, that they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality. With that said, we believe that the benefits of exceptions to pre-trade transparency requirements for large orders entered into by funds outweigh the costs to the markets of providing such exceptions. We also support regulatory authorities ensuring that exceptions are applied consistently and coherently, that their use is not being abused, and that there is legal certainty regarding the interpretation of the rules applying to the exceptions.

Indications of Interest ("IOIs")

The Consultation states that with regard to pre-trade transparency and dark pools and dark orders, regulators need to clarify the types of orders that will be considered firm bids and offers. The Consultation cites "actionable IOIs" as an example of a type of potential order that is intended to attract immediately executable order flow to a trading venue, and that regulators should examine whether it is appropriate to treat actionable IOIs as firm public quotes that should be displayed.

ICI addressed the issue of actionable IOIs in its letter to the SEC on undisplayed liquidity. Description of the SEC's proposal amended the definition of bid or offer for purposes of the quoting requirements of the Securities Exchange Act of 1934 to apply expressly to actionable IOIs privately transmitted by dark pools and other trading venues to selected market participants. One of the goals of the SEC's proposal was to make more quotes available to the public by requiring their inclusion in the consolidated quotation data.

ICI members do not typically permit their orders to be advertised via actionable IOIs (as those IOIs are characterized and defined in the SEC proposal), most significantly for fear of frontrunning. Therefore, while the SEC's proposal would, in effect, eliminate actionable IOIs, we believe the benefits of pre-trade transparency outweigh any impact (limited as it might be) on fund trading. We therefore support the principle of treating actionable IOIs as firm public quotes that should be displayed.

⁹ For example, in the case of the SEC's proposal, drafting an exception based on a large dollar value of an order may exclude certain large-sized orders in small-cap and mid-cap stocks that wouldn't reach that threshold, but would raise the same concerns about the frontrunning of orders and information leakage as excepted orders. We therefore recommend that regulatory authorities draft exceptions for large-sized trades to include thresholds based not only on the value of a trade, but also on a variety of factors, *e.g.*, the lesser of the value of a trade, the number of shares of a trade, or the percentage of the average daily volume of a stock that a trade represents.

¹⁰ See ICI Letter on SEC Non-Public Trading Interest Proposal, supra note 4.

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Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

ICI generally supports increasing post-trade transparency of information about dark pools and dark orders. At the same time, as discussed above, we believe that adequate exceptions to post-trade transparency to facilitate and ensure the efficient execution of large orders are critical.

The Consultation notes that in examining whether information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public, regulators should consider whether it is appropriate to require that the identity of the dark pool operator be revealed and, if so, how (*e.g.*, trade-by-trade and real time; trade-by-trade and end of day; or end-of-day and aggregate volumes in individual stocks).

The SEC recently proposed requiring the real-time disclosure of the identity of dark pools on trade reports. Currently, published trade reports in the United States only identify these types of trades as over-the-counter trades and do not identify the particular venue or other broker-dealer that reported the trade. While ICI supported the SEC's goal of increasing post-trade transparency for dark pools, we expressed concerns about several unintended consequences for funds.

Specifically, while the SEC included an exception in its proposal for certain large-sized trades that was intended to mitigate funds' concerns relating to information leakage, the real-time disclosure of the identity of the specific dark pool where non-excepted trades were executed will nevertheless reveal too much information about fund orders. It is important for regulatory authorities to take into account that only a small portion of trades in dark liquidity venues take place in pools specializing in trading large blocks of securities. More often, funds must break up their larger "parent" orders into smaller "child" orders and execute these orders in other types of venues. ICI therefore believes that the real-time disclosure of individual venues would provide another crucial "piece of the puzzle" to those who intend to prey off the orders of funds and has the potential to facilitate the frontrunning of funds' security positions.

While ICI does not support the real-time disclosure of individual dark pools, we do support such disclosure on a delayed basis. To address concerns about the frontrunning of fund trades, we have recommended that regulators require the disclosure of the identity of individual dark pools on trade reports at the end of the trading day, on a stock-by-stock basis (*i.e.*, the volumes for each individual stock that were executed by the dark pool). Our members generally believe that this disclosure should apply uniformly across all types of stocks. Several ICI members, however, remain concerned that end-of-day disclosure for certain less liquid stocks, such as small-cap and mid-cap stocks, could still lead to frontrunning of fund trades. We therefore would not object to a bifurcated disclosure model where trades in large-cap, liquid stocks would be required to be disclosed at the end of the day and trades in smaller, less liquid stocks would be required to be disclosed on a further delayed basis (*e.g.*, T+5). To

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further transparency of trades, we recommend that any trades that would have been excepted under the SEC's proposal, *i.e.*, large block trades, also be disclosed on a delayed basis in this manner.¹¹

Topic 2: Priority of Transparent Orders

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

ICI strongly supports efforts to provide incentives for market participants to use transparent orders. A long-standing concern regarding dark liquidity is whether its trading volume has reached a sufficiently significant level that it impairs the quality of public price discovery. We believe the time is ripe for regulatory authorities to examine the impact of certain undisplayed liquidity on price discovery, as well as potential ways to encourage the further public display of orders.

Problems surrounding the lack of order interaction, its causes, and its impact on the securities markets are not new. ICI and its members have, for many years, recommended changes that would facilitate greater order interaction and, in turn, more efficient trading. For example, the Consultation notes that support for the use of transparent orders might be facilitated by providing for trade-through protection for transparent orders. When Regulation NMS was proposed in the United States, the Institute supported the establishment of a uniform trade-through rule for all market centers. ¹² By affirming the principle of price priority, we believed a trade-through rule should, among other things, encourage the display of limit orders, which in turn would improve the price discovery process and contribute to increased market depth and liquidity. While Regulation NMS has resulted in several improvements to the operation of the securities markets in the United States, it arguably has not resulted in the increased display of orders as intended. This is not necessarily due to the trade-through rule itself or other efforts to provide incentives to display orders, but to other recent market structure developments that continue to raise concerns among investors about the frontrunning of their orders.

Ideally, funds would like as much liquidity as possible to be executed in the displayed markets. Nevertheless, we believe it is imperative that venues trading dark liquidity remain available to funds and that the regulations overseeing these venues facilitate their continued use. We are therefore concerned by suggestions in the Consultation that rather than incentivizing the use of transparent orders on transparent markets, regulators may choose to have only limited exceptions to pre-trade transparency (e.g., by limiting exceptions in those jurisdictions in which they are available). We do not believe that limiting exceptions would necessarily result in more orders being placed in displayed markets. Funds,

¹¹ We believe this information should not be disclosed on an aggregated basis (*e.g.*, disclosure solely of the total volume for each individual trading venue) as this information would not be helpful to investors in assessing trading or identifying the volume of executions in particular stocks on individual venues.

¹² See ICI Regulation NMS Letter, Appendix A.

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for example, would still face concerns regarding the frontrunning of their orders and would be reluctant to place large orders in displayed markets. ICI therefore recommends that regulatory authorities focus on examining methods to provide incentives for market participants to increase the display of orders, such as providing increased protection for displayed orders, while at the same time preserve needed exceptions to the pre- and post-trade transparency requirements.

Undisplayed Liquidity Handled by OTC Market Makers - Internalization

Broker-dealer internalized order flow represents a significant portion of undisplayed liquidity in the United States that funds do not have an opportunity, for the most part, to trade against, making trading large orders more difficult. Internalization raises a variety of concerns. For example, internalization may increase market fragmentation because it can result in customer orders not being publicly exposed to the market.

ICI has not suggested that internalization be prohibited. We have recommended, however, that further action be taken to ensure that internalized orders receive best execution. Specifically, any order executed through internalization should be provided with "significant" price improvement.¹³ Such a requirement would ensure that the internalizing broker-dealer provides at least some amount of "significant" price improvement to an internalized order and could potentially result in more customer orders being exposed to displayed markets if the amount of internalized orders is reduced.

Topic 3: Reporting to Regulators

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

ICI agrees with the Technical Committee that to understand the market structure issues posed by dark pools and to monitor trends in trading and trading behavior, it is important that regulators have access to accurate, timely and detailed information regarding trades executed through dark pools, as well as dark orders traded on transparent markets.

ICI has provided recommendations to the SEC on certain aspects of creating a reporting regime for regulatory authorities with respect to the SEC's proposal to develop, implement, and maintain a consolidated audit trail ("CAT") and a central repository for the CAT data for the trading of listed equities and options. ¹⁴ ICI supported the establishment of a CAT. As the "flash crash" in the

¹³ We question whether providing price improvement to internalized orders in, for example, increments of hundredths of a penny is providing meaningful price improvement.

¹⁴ See ICI Consolidated Audit Trail Letter, Appendix A. See also SEC Release No. 62174 (May 26, 2010), 75 FR 32555 (June 8, 2010), available at http://www.sec.gov/rules/proposed/2010/34-62174.pdf. The SEC's proposal would require "self-regulatory organizations" ("SRO") and their members to provide detailed information regarding an order to a proposed repository on a real-time basis, including information sufficient to identify the customer. Each SRO and the SEC would have unlimited access to this information for purposes of performing their regulatory and oversight responsibilities.

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United States illustrated, the SEC currently is unable to gather the information necessary to quickly and efficiently assess market events and trading activity. Nevertheless, while we supported the CAT, we expressed significant concerns over the confidential treatment of CAT data and any requirement for providing data in real time. ¹⁵ Specifically, we noted concerns regarding the confidentiality of specific information about fund orders, particularly since this information would pass through and potentially be exposed to several market participants before reaching regulators. We believe our recommendations in this area can be useful to regulatory authorities as they examine methods to enhance trade reporting of dark pools.

Topic 4: Information Available to Market Participants about Dark Pools and Dark Orders

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

We strongly agree with the principle that it is important that market participants understand the way in which dark pools and dark orders in transparent markets operate. On several occasions, ICI has expressed the need for increased information regarding the routing of orders and the execution practices of trading venues. We believe that improved information would allow investors to make better informed investment decisions and, in turn, facilitate best execution. Currently, many funds feel that they do not have ready access to complete information about the orders provided to brokers and other trading venues, including those involving dark liquidity.

We therefore support the Technical Committee's suggestions that dark pools or transparent markets offering dark orders should ensure that market participants are provided with detailed explanations of information including: how trading occurs; how dark orders interact with transparent orders; which orders have priority; whether IOIs are disseminated and, if so, to whom; and policies and procedures that are intended to facilitate the management and disclosure of conflicts of interest that provide clarity around who has access to information about the dark pool and/or dark orders. This information is very similar to the information we have recommended the SEC consider requiring from broker-dealers and other trading venues.¹⁷

¹⁵ The SEC also has proposed the creation of a large trader reporting system that would enhance the SEC's ability to identify the effects of certain large trader activity on the markets, reconstruct trading activity following periods of unusual market activity, and analyze market events and trading activity for regulatory purposes. *See* ICI Large Trader Reporting Letter, Appendix A. *See also* SEC Release No. 61908 (April 14, 2010), 75 FR 21456 (April 23, 2010).

¹⁶ See, e.g., ICI Letter on SEC Concept Release on Equity Market Structure, supra note 4.

¹⁷ *Id.* Specifically, we recommended that certain information regarding the order routing and execution practices of broker-dealers and other trading venues be required, including: payments and other incentives provided or received to direct order flow to particular trading venues; specific information regarding the routing and execution of orders, for example, the trading venues to which an order was routed and did not get filled prior to being executed; external venues to which a broker routes orders, the percentage of shares executed at each external venue, and any ownership and other affiliations between the

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Topic 5: Regulation of the Development of Dark Pools and Dark Orders

Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

ICI strongly supports regulatory authorities having adequate arrangements in place to continue to examine the changes to the structure of the securities markets and to identify emerging issues in a timely fashion. We also agree with the Technical Committee that as more dark pools evolve and equity market structures continually change, it is important that regulators monitor the development of dark pools.

We are concerned, however, about the breadth of the statement in the Consultation that such review by regulators could lead, in some jurisdictions, to a reduction of dark trading and/or dark orders. As discussed above, dark liquidity provides numerous benefits to funds. Reducing dark trading and/or dark orders without first closely considering the consequences on investors could negatively impact the trading by funds on behalf of their shareholders.

* * * * *

If you have any questions on our comment letter, please feel free to contact me directly at (202) 326-5815, or Ari Burstein at (202) 371-5408.

Sincerely,

/s/ Karrie McMillan

Karrie McMillan General Counsel

broker and any venues to which the broker routes orders; policies and procedures regarding the dissemination of information about a customer's order and trade information to facilitate a trade; and policies and procedures to control leakage of information regarding a customer's order and other confidential information.

Appendix A Key ICI Comment Letters and Statements on Market Structure Issues

Order Execution Obligations: Letter from Craig S. Tyle, Senior Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated January 16, 1996; available at http://www.ici.org/pdf/7561.pdf

Regulation of Exchanges and Alternative Trading Systems: Letter from Craig S. Tyle, General Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated July 28, 1998; available at http://www.ici.org/pdf/comment98 reg_exch_ats.pdf

<u>Market Fragmentation Concept Release</u>: Letter from Craig S. Tyle, General Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated May 12, 2000; available at http://www.ici.org/pdf/11894.pdf

<u>Subpenny Concept Release</u>: Letter from Craig S. Tyle, General Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated November 20, 2001; available at http://www.ici.org/policy/comments/01 SEC SUBPENNY COM

Regulation NMS: Letter from Ari Burstein, Associate Counsel, Investment Company Institute, to Jonathan G. Katz, Secretary, Securities and Exchange Commission, dated June 30, 2004; available at http://www.ici.org/policy/markets/domestic/04_sec_nms_com

<u>U.S. Senate Market Structure Hearing</u>: Statement of the Investment Company Institute, Hearing on "Dark Pools, Flash Orders, High Frequency Trading, and Other Market Structure Issues," Securities, Insurance, and Investment Subcommittee, Committee on Banking, Housing & Urban Affairs, U.S. Senate, October 28, 2009; available at http://www.ici.org/pdf/23925.pdf

<u>Flash Orders</u>: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated November 23, 2009; available at http://www.ici.org/pdf/23973.pdf

Non-Public Trading Interest: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated February 22, 2010; available at http://www.ici.org/pdf/24142.pdf

<u>Market Access</u>: Letter from Ari Burstein, Senior Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated March 29, 2010; available at http://www.ici.org/pdf/24210.pdf

SEC Concept Release on Equity Market Structure: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated April 21, 2010; available at http://www.ici.org/pdf/24266.pdf

SEC Market Structure Roundtables: Letters from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 1, 2010 and June 23, 2010; available at http://www.ici.org/pdf/24361.pdf and http://www.ici.org/pdf/24384.pdf

<u>Circuit Breakers</u>: Letters from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 3, 2010 and July 19, 2010; available at http://www.ici.org/pdf/24364.pdf and http://www.ici.org/pdf/24438.pdf

<u>Large Trader Reporting System</u>: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated June 22, 2010; available at http://www.ici.org/pdf/24381.pdf

<u>Clearly Erroneous Executions</u>: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated July 19, 2010; available at http://www.ici.org/pdf/24437.pdf

Consolidated Audit Trail: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated August 9, 2010; available at http://www.ici.org/pdf/24477.pdf

<u>European Commission Review of MiFID</u>: Letter from Karrie McMillan, General Counsel, Investment Company Institute, to Directorate General, European Commission, dated February 2, 2011; available at http://www.ici.org/pdf/24946.pdf



27 January 2011

Mr Werner Bijkerk

darkliquidity@iosco.org

Dear Mr Bijkerk

Public Comment on Issues Raised by Dark Liquidity

The IMA represents the asset management industry operating in the UK. Our Members include independent fund managers, the investment arms of retail banks, life insurers and investment banks, and the managers of occupational pension schemes.

They are responsible for the management of around £3.4 trillion of assets as at the end of 2009, which are invested on behalf of clients globally. These include authorised investment funds, institutional funds (e.g. pensions and life funds), private client accounts and a wide range of pooled investment vehicles.

IMA members manage £1.5 trillion in global equities for clients many of whom are insurance and pension funds; those institutional clients account for the bulk of assets under management in equities. Typically the trades for institutional mandates are executed in large block size, often a multiple of the normal market size. There is no doubt that institutional investors and their clients benefit from the existence of dark pools in mitigating the market impact of their trades. In order to reduce the aggregate loss from market impact and opportunity cost, dark pools of liquidity play a vital part in ensuring that institutional investors have an additional choice of venue in which to discover liquidity alongside regulated markets and MTFs.

IMA members therefore welcome IOSCO's public consultation on issues raised by dark liquidity and appreciate the work which has gone into the report. **We fully support all the principles as drafted and in particular principle 5.** IMA members have often expressed concerns that they cannot find out how and where their orders have been handled. A robust framework to help improve the quality of post-trade data would increase confidence in post-trade transparency and alleviate some of the misperceptions and concerns regarding dark pools.

With regard to public disclosure of trades executed in dark pools as addressed in principle 2, IMA members would broadly support disclosure to be on a trade by trade real time basis or at end of day. We do not believe that there is any informational advantage to be gleaned from the disclosure of a cross trade and therefore that there would not be many disadvantaged by such disclosure.

We would also stress that in relation to those trading venues, regulators need particularly to keep up to date and to watch for innovations which seek to avoid the impact of inflexible legal definitions.

If you have any further queries please do not hesitate to contact me.

Yours sincerely

liz Rae.

Liz Rae

Senior Adviser – Investment and Markets

Hong Kong

London

New York

Sydney

Tokya

Toronte

February 3, 2011

By e-mail

Mr. Werner Bijkerk
Senior Policy Advisor
International Organization of Securities Commissions (IOSCO)
Calle Oquendo 12
28006 Madrid
Spain
darkliquidity@iosco.org

Re: Public Comment on Issues Raised by Dark Liquidity

Ladies and Gentlemen,

Liquidnet Holdings, Inc. appreciates the opportunity to submit this comment letter on the consultation report published by the Technical Committee of the International Organization of Securities Commissions (IOSCO) entitled "Issues Raised in Dark Liquidity" (the Consultation Report).

We commend IOSCO for issuing a paper that presents a balanced view of the issues relating to dark liquidity. If regulations are adopted to restrict dark liquidity, appropriate exceptions must be provided for large institutional orders. These exceptions are necessary to protect the hundreds of millions of individual long-term investors globally who invest through mutual funds, pension and retirement funds, investment trusts, unit trusts, investment funds, managed funds, managed investment schemes and other collective investment vehicles.

As noted by IOSCO,

"[R]egulators must also keep in mind the trading interests of professional (i.e. non-retail) investors, who are primarily concerned about the costs of pre-trade transparency as they typically trade in very large sizes. It is these trading interests of professional investors that are often cited as one of the major reasons for the current interest in dark pools and dark orders."

It must be emphasized that the institutions that trade on behalf of hundreds of millions of investors globally invest for the long-term. As such, these institutions represent the most consistent and reliable source of capital for companies worldwide. We must ensure that we do not impose additional costs on these institutions and the hundreds of millions of individuals globally on whose behalf they invest.

¹ Consultation Report, p. 15



1. Background on Liquidnet

Liquidnet Holdings is the parent company of Liquidnet, Inc., Liquidnet Europe Limited, Liquidnet Canada Inc., Liquidnet Asia Limited, Liquidnet Australia Pty. Ltd., and Liquidnet Japan Inc. These entities operate the Liquidnet trading system for trading in 39 markets globally on five continents. We plan to expand to our 6th continent, South America, in 2011.

There is no system like Liquidnet. Consider our average negotiated execution size on each of the five continents where we provide trading services:

Continent	Sample country	Average negotiated execution on Liquidnet ²	Average execution size on the primary exchange	Magnitude of difference
Africa	South Africa	47,049,950 Rand	119,631 Rand ³ (JSX)	393
Asia	Hong Kong	HKD10,658,632	HKD96,551 ⁴ (SEHK)	110
Australia	Australia	A\$1,246,153	A\$9,313 ⁵ (ASX)	134
Europe	France	€1,534,445	€6,925 ⁶ (Euronext)	221
North America	U.S.	\$1,407,105	\$9,104 ⁷ (NYSE)	155
			\$6,495 ⁸ (NASDAQ)	217

The right-most column compares the average execution size on Liquidnet to the average execution size on the primary exchange in the applicable jurisdiction. For example, Liquidnet's average execution size for U.S. securities is \$1,407,105 principal value, 9 which is 155 times larger than the average execution size on the New York Stock Exchange and 217 times larger than the average execution size on NASDAQ. 11

Liquidnet provides a system used by institutional investors worldwide to negotiate block trades directly with like-minded institutions. Institutions that use Liquidnet reduce their trading costs by

² Liquidnet trading data for Q4 2010.

³ Thomson Reuters Market Share Reporter Tool, Johannesburg Stock Exchange trading data for Q4 2010.

⁴ HKSE Q4 2010 data, http://www.hkex.com.hk/eng/stat/smstat/statarch/tv2010.htm (accessed February 2, 2011).

⁵ ASX Group trading data for Q4 2010.

http://www.asxgroup.com.au/media/PDFs/20101006 asx group monthly activity report september.pdf, http://www.asxgroup.com.au/media/PDFs/DEC MA MONTHLY ACTIVITY.pdf (accessed February 2, 2011).

⁶ Thomson Reuters Market Share Reporter Tool, Euronext trading data for Q4 2010.

⁷ NYSE Q4 2010 data,

http://www.nyxdata.com/nysedata/asp/factbook/viewer_edition.asp?mode=table&key=3133&category=3 (accessed February 2, 2011) ("NYSE Data for Q4 2010").

⁸ NASDAQ Q4 2010 data, http://www.nasdaqtrader.com/Trader.aspx?id=MonthlyMarketSummary (accessed February 2, 2011) ("NASDAQ Data for Q4 2010")

⁹ Liquidnet trading data for Q4 2010.

¹⁰ NYSE Data for Q4 2010.

¹¹ NASDAQ Data for Q4 2010.

avoiding the market impact costs that result when institutional block orders are exposed to high-frequency traders and other short-term traders in the market. Cost savings achieved by institutional investors using Liquidnet are passed on to the hundreds of millions of long-term individual investors globally on whose behalf our customers trade, resulting in reduced trading costs and higher investment returns for these individual investors.

In 2008, a BrokerEdge™ report on trading in U.S. securities ranked Liquidnet #1 in execution quality for institutional orders across all global brokers. ¹² We similarly were ranked #1 in the most recently published BrokerEdge™ report, covering the period from Q4 2008 through Q3 2009. ¹³

In addition to reduced market impact, Liquidnet provides significant price improvement for customer orders. In a comment letter on the "Concept Release on Equity Market Structure" issued by the U.S. Securities and Exchange Commission (SEC) in 2010, 14 Credit Suisse presented data publicly available pursuant to SEC Rule 605 showing for 2009 that internalizing dealers provided approximately 6% price improvement of customer orders on average. We reviewed the same Rule 605 data for the 2nd half of 2010 and found that the industry provided 3.94% price improvement of customer orders on average. According to the same data filed pursuant to SEC Rule 605, Liquidnet provided 95.05% price improvement for customer orders during the same period, which is 24 times more than the average price improvement provided by the industry.

2. Draft principles on dark liquidity

We now comment specifically on the six draft principles on dark liquidity proposed by IOSCO. As a general comment, we would like to see the balanced approach in the discussion section of the Consultation Report more specifically reflected in the text of the draft principles.

Principle 1: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

http://www.pionline.com/apps/pbcs.dll/article?AID=/20100308/CHART/100309924&crit=liquidnet&template=printart (accessed February 2, 2011).

¹² Investment Technology Group "ITG Broker Edge™ Core Broker Report" for U.S. trades for the four quarters ended December 31, 2008, cited in April 30, 2009 press release, "Liquidnet Ranked #1 in 62% of all Execution Categories According to ITG Broker Edge™ Core Broker Report."

¹³Tradewatch, Pensions & Investments, March 8, 2010,

¹⁴Securities Exchange Act Release No. 61358 (January 14, 2010), 75 FR 3594 (January 21, 2010), http://sec.gov/rules/concept/2010/34-61358.pdf (accessed February 2, 2011) ("SEC Concept Release").

¹⁵ Letter dated April 21, 2010 from Daniel Mathisson, Managing Director, on behalf of Credit Suisse Securities USA, LLC, http://sec.gov/comments/s7-02-10/s70210.shtml (accessed February 2, 2011), pp. 5 and 14.

¹⁶ Rule 605 data compiled by Thomson Transaction Analytics Reports, July to November 2010 (data for December 2010 not yet available) ("TTAR Data").

¹⁷ TTAR Data (July to November 2010). Rule 605 data allows for a computation of price improvement based on a comparison of the execution price to the CBBO (consolidated best bid and offer) at the time of order receipt, with price improvement = 1 – effective spread/quoted spread. Using this computation, and applying the computation to orders that qualify as covered orders under Rule 605, Liquidnet H2O provides over 95% price improvement for customer orders. If price improvement is measured against the CBBO at the time of order execution, Liquidnet provides 100% price improvement.



Industry consensus on the value of dark pools for executing large institutional orders

Robert Greifeld, Chief Executive Officer of Nasdaq, the world's largest electronic stock exchange, stated as follows in response to a question on dark pools during a recent television interview with Steve Forbes, the owner and editor-in-chief of *Forbes* magazine:

"... a dark pool that's doing *a large size, that's clearly a value added*, because we know today that if you come into the lit market with larger size, you have a disproportionate impact on the lit market." ¹⁸

Mr. Greifeld, like many other exchange Chief Executive Officers, has been a vocal opponent of dark pools that execute small orders. We disagree with this position as we believe that dark pools can provide value for small orders, for example, by providing significant price improvement. But the more important point is that notwithstanding Mr. Greifeld's views with respect to dark pools that execute small orders, Mr. Greifeld acknowledges the value that dark pools provide for executing large institutional orders.

NYSE Euronext agrees that dark pools provide value for executing large orders through reduced market impact and discovery of block counterparties:

"The trend towards smaller execution sizes in central 'lit' order books boosts the demand for alternative trading models. Dark pools respond to this demand by offering the industry *a place for trading large orders with minimal impact on prices* and allow professional investors to search counterpart[ies]. Therefore, we strongly believe that there are benefits in offering services complementary to order books." 19

The London Stock Exchange plc and Borsa Italiana have written similarly on the value of dark pools for executing large orders "without adverse market impact":

"Whilst participants want and need sufficient transparency to create market confidence, this should not undermine their ability to deliver an investment return to end customers or to achieve execution certainty for larger orders without adverse market impact. Therefore, allowing non-displayed trading to take place within the parameters of the appropriate waivers is essential to provide choice and flexibility for end investors, without undermining the execution certainty of displayed orders and at the same time preserving the competitiveness of public order books."²⁰

¹⁸"Interview with Robert Greifeld, Intelligent Investing with Steve Forbes," December 3, 2010, http://www.forbes.com/2010/12/03/greifeld-nasdaq-psx-intelligent-investing-video.html?partner=daily_newsletter (accessed February 2, 2011).

¹⁹"Comments from NYSE Euronext in Response to CESR's Call for Evidence on the Impact of MiFID on Secondary Markets Functioning (CESR/08-872)", January 2009, http://www.esma.europa.eu/popup_responses.php?id=4464 (accessed February 2, 2011).

²⁰ "LSEG Response to CESR MiFID Consultation Paper 10-394 – Equity Markets", 28 May 2010, http://www.esma.europa.eu/popup responses.php?id=5426 (accessed February 2, 2011), p. 2.



The focus of Liquidnet's business, and the focus of our comment letter, is the use of dark pools for executing large orders. There is a clear industry consensus, even among exchanges, that dark pools that reduce trading costs for executing large orders provide a benefit to the market.

Numerous institutional investors, buy-side trade groups, industry experts and research academics from multiple continents have described the benefits of block crossing systems for the execution of institutional block orders (see Exhibit 1). The cost savings that institutions achieve when they trade through block crossing systems are passed on to the hundreds of millions of investors globally who invest through unit trusts, investment trusts, pension funds, investment funds and similar pooled investment vehicles. We recommend that IOSCO give careful consideration to the comments on Exhibit 1, as the commenting parties represent institutions that trade on behalf of hundreds of millions of individual investors globally.

Consistent with the industry consensus, Kay Swinburne, an MEP from Wales,²¹ recently commented favorably on Liquidnet and other systems that seek to address the specific needs of long-term investors:

"I have been watching the development of NASDAQ OMX's latest US equity platform that has a minimum size order threshold, rewarding size not frequency of trade, as well as the progress of buy-side only MTFs like Liquidnet that choose to build in latency to their systems in order to filter participants wishing to access their systems.

Both of these methods have been discussed by regulators on both sides of the Atlantic, yet thankfully, no one has looked to impose blanket solutions to entire markets. The more market solutions and options for investors that spring up to fill the gap between the perceived weaknesses in the market and its ability to serve its primary purpose, the less regulation we will need to come up with to fill the void."²²

Regulatory proposals to mandate transparency of orders must have appropriate exceptions for large institutional orders

Institutions must have the ability to protect the confidentiality of their large orders. If an institution introduces a buy order for 50,000 shares into a market that is designed to handle 300-share orders, short-term traders in the market can buy shares ahead of the institution knowing they can sell back to the institution at a higher price. This means higher trading costs for

²¹ Ms. Swinburne is the European Conservatives and Reformists (ECR) Group's Coordinator on the Economics and Monetary Committee in the European Parliament and the ECR Group's Coordinator on the Special Committee on the Financial, Economic and Social Crisis.

²² Kay Swinburne, Markets in Financial Instruments Directive, ICI New York, December 8, 2010, http://www.kayswinburne.co.uk/articles/MarketsinFinancialInstrumentsDirectiveICINewYork081210/63 (accessed February 2, 2011).

institutions and, as a result, lower investment returns for the hundreds of millions of long-term investors globally that invest through collective investment vehicles.

Block order pools like Liquidnet that help institutions protect the confidentiality of their large orders are an effective method for institutions to reduce their trading costs. Any regulatory proposals relating to dark pools that seek to force transparency of orders must have appropriate exceptions for large institutional orders.

While we do not support forced transparency of orders, if transparency of orders is mandated, there are ways to do so that have less of an adverse impact on institutions seeking to execute large orders. For example, Canada recently issued for comment a series of proposals to mandate pre-trade transparency. However, the Canadian regulators provided an exception for orders of 50 trading units (typically 5,000 shares) or more. They also provided an exception for orders of less than 50 trading units where material price improvement is provided. The Canadian regulators also proposed that a stub (the unexecuted portion of a previously executed block order) would be exempt from the pre-trade transparency requirement.

We do not believe that the restrictions proposed by the Canadian regulators are necessary because we believe that short-term traders are incentivized to display liquidity. But we acknowledge that the Canadian regulators have attempted to impose pre-trade transparency mandates in a manner that seeks to focus on smaller orders and minimize any adverse impact on institutions executing block orders. In this regard, we would recommend that regulators seeking to impose additional pre-trade transparency mandates take into consideration the approach of the Canadian regulators in this area.

Block crossing systems like Liquidnet do not detract from market transparency because (i) they handle a small percentage of overall market volume and (ii) the block order flow that they attract would otherwise be executed in the over-the-counter market

In determining whether to force transparency of institutional block orders, we have to consider whether block crossing systems like Liquidnet detract from market transparency.

The first question to consider is whether block crossing systems like Liquidnet represent a significant percentage of market volume. In Europe, for example, Liquidnet is registered as a "multilateral trading facility," and a recent report by TABB Group estimates that only 2% of trades in the U.K. are executed on dark MTFs.²⁷ We do not believe that the percentage of trades executed on block crossing systems in other regions is materially higher.

http://www.osc.gov.on.ca/documents/en/Securities-Category2/csa 20101119 23-405 dark-liquidity.pdf (accessed February 2, 2011) ("CSA/IIROC Position Paper").

²³ Canadian Securities Administrators and Investment Industry Regulatory Organization of Canada, "Position Paper 23-405, Dark Liquidity in the Canadian Market", November 19, 2010,

²⁴ CSA/IIROC Position Paper, (2010) 33 OSCB 10769-10770.

²⁵ CSA/IIROC Position Paper, (2010) 33 OSCB 10770.

²⁶ CSA/IIROC Position Paper, (2010) 33 OSCB 10770.

²⁷ Will Rhode and Miranda Mizen, TABB Group, "Breaking Down the UK Equity Market – Equitable Liquidity, Dark Trading, High Frequency and Swaps", January 2011, p. 7 ("Rhode and Mizen").



The second question is whether restricting institutions in their use of block crossing systems would lead to increased market transparency. As discussed in more detail below, if institutions were restricted in their use of block crossing systems, institutions most likely would shift their order flow allocated for block crossing systems to the traditional over-the-counter market. Accordingly, we do not believe that block crossing systems detract from market transparency, nor are we aware of any data that would support such an assertion.

The risk of trading moving to less-regulated execution venues

Liquidnet's trading system is registered as an alternative trading system (ATS) in the U.S. and Canada and as a multilateral trading facility (MTF) in Europe. As a registered ATS and MTF, Liquidnet is subject to various regulatory requirements to which others market participants are not subject. One potential unintended consequence that must be taken into consideration is the potential risk of trading moving from more closely regulated ATSs and MTFs to less closely regulated over-the-counter execution venues as a result of restrictions being imposed on ATSs and MTFs that restrict their ability to reduce trading costs for large institutional orders.

Market participants have different objectives and strategies

In determining the appropriate market structure, it is important to understand that different market participants have different objectives and strategies. In particular, certain market participants can benefit from displaying quotes, while other market participants can be adversely impacted by displaying quotes. A one-size-fits all market cannot meet the needs of all investors, and we should ensure that the market structure provides sufficient flexibility to meet the requirements of different types of participants, including, in particular, institutions that trade on behalf of long-term investors.

Posting quotes is an essential strategy for HFT and other short-term traders

A short-term trader, such as a high-frequency trader or a market maker, seeks to profit from the bid-ask spread in the market. For example, if a short-term trader posts a quote to buy 100 shares at €10.00 and a quote to sell 100 shares at €10.02, and both quotes are hit, the short-term trader earns a profit of €2.00. The short-term trader can earn a significant profit by executing thousands of trades per day and earning a small profit on each trade. Displaying liquidity is an essential element of this spread capture strategy because displaying liquidity enables the short-term trader to attract contra-side liquidity and profit from the bid-ask spread.

Another important and related component of the short-term trader's strategy is the ability to anticipate upcoming short-term price movements in a stock. The short-term trader's systems seek to determine the relative buy and sell demand in the market and how any imbalance will impact the stock-price in the short-term. If a short-term trader's system can detect a large institutional buy order, the short-term trader can seek to buy stock ahead of the institution, with the confidence that it will be able to sell the shares back to the institution at a higher price. For example, if the market is €10.00-€10.02, and the short-term trader detects a large buy order, the short-term trader can raise its bid to €10.01 and higher to purchase shares ahead of the institution, with the confidence that the short-term trader can sell shares back to the institution at an even higher price.



Displaying quotes is an essential element of this order anticipation strategy. When the short-term trader displays a quote, it attracts liquidity to execute against the quote. One of the reasons that the short-term trader focuses on speed is to ensure that it can post quotes ahead of other market participants, enabling the short-term trader to buy or sell ahead of other market participants.

Posting quotes involves trade-offs for long-term investors

While posting quotes is an essential element of the short-term trader's strategy, for institutions representing long-term investors there are trade-offs in posting a quote. The benefits for the institution are similar to the benefits for the short-term trader:

- Posting a quote provides time priority against other incoming orders on the same side
- Posting a quote attracts contra-side liquidity
- The institution can capture the spread.

The primary downside for the institution in posting a quote is that the institution must display a block order or the institution's order must continually be replenished to get an aggregate execution of meaningful size. This exposes the institution's order to short-term traders who can trade ahead of the order.

Is non-displayed liquidity really growing?

Rather than considering the growth of dark pool volume in isolation, it is important to consider the ratio of dark pool volume and dealer internalisation collectively relative to the percentage of exchange volume, and whether and how that ratio has changed over time.

As explained by Dr. Erik Sirri, former head of the SEC's Division of Trading and Markets:

"One of the common concerns expressed about the rise of dark ATSs as a trading venue, however, is that they threaten to supplant quoting venues and cause the equity markets to become less transparent. At least thus far, this concern does not appear to be well-placed. Rather than focusing too narrowly on the expanding trading volume of dark ATSs, a more telling measure of the health of quoting venues is to compare the cumulative trading volume of quoting venues with the cumulative trading volume of dark venues.

As I will discuss shortly, these volume percentages reveal that quoting venues collectively have maintained a remarkably stable percentage of total equity trading. Instead of a migration of trading volume from quoting venues to dark venues in recent years, most of the movement in trading volume has been within each of the two categories of quoting venues and dark venues; that is, volume has shifted among various quoting venues and among various dark venues, but has not shifted out of quoting venues into dark venues. The quoting venues — exchanges and ECNs — have engaged in a fierce battle for order flow for many years. Similarly, the increasing percentage of trading volume of dark ATSs largely has come as the percentage of trading volume of broker-dealer internalisers has declined.



The rise of dark ATSs has not, contrary to what might be expected, led to a decline in the success of the business model for quoting venues...."²⁸

We believe Dr. Sirri's analysis is equally applicable to equity markets in other countries, and we have not seen any data to the contrary. In Europe, it is clear from the analysis by the Committee of European Securities Regulators (CESR) that trading under pre-trade waivers represents less than 10% of all trading on Regulated Markets (RMs) and MTFs. ²⁹ It is equally clear that most trading under pre-trade waivers in Europe takes place in RMs and not MTFs. ³⁰

It is also clear that the significant majority of non-displayed trading takes place in the over-the-counter market. But has non-displayed trading grown from its historical average? In Europe, we have not seen any data to support this assertion. In the U.S., the SEC reported in the "Concept Release on Equity Market Structure" it issued last year that "... the overall percentage of trading volume between undisplayed trading centers and displayed trading centers has remained fairly steady for many years between 70% and 80%." 31

We believe that the percentage of non-displayed trading in North America, Europe and other regions has remained within its historical range, and we have not seen data to the contrary. One factor that contributes to an equilibrium of displayed and non-displayed liquidity over time is that different investors have different investment objectives and different strategies to meet those objectives. Some market participants, including many short-term traders, need to display quotes to implement their trading strategy; other market participants, including many long-term investors, can be adversely impacted by displaying quotes. This has led to different execution venues serving different investor needs. This is true today, and it has been true historically.

This equilibrium (also referred to as "negative feedback"³² or "homeostasis"³³) is further maintained through the mechanism of quoted spreads. If more market participants were to adopt trading strategies that did not involve order display, the result would be a widening of quoted

²⁸ Erik Sirri, Director, Division of Trading and Markets, Securities and Exchange Commission, "Keynote Speech at the SIFMA 2008 Dark Pools Symposium", February 1, 2008,

http://www.sec.gov/news/speech/2008/spch020108ers.htm (accessed February 2, 2011), pp. 3-4.

²⁹ Committee of European Securities Regulators, "Consultation Paper – CESR Technical Advice to the European Commission in the Context of the MiFID Review – Equity Markets – CESR 10-394," 13 April 2010, http://www.cesr.eu/data/document/10 975.pdf (accessed February 2, 2011)," p. 6.

³⁰ Rhode and Mizen, p. 7.

³¹SEC Concept Release, pp. 69-70.

³²According to Wikipedia, "negative feedback occurs when the output of a system acts to oppose changes to the input of the system, with the result that the changes are attenuated."

http://en.wikipedia.org/wiki/Negative feedback (accessed February 2, 2011) ("Wikipedia Negative Feedback").

33 According to Wikipedia, "homeostasis ... is the property of a system that regulates its internal environment and tends to maintain a stable, constant condition." http://en.wikipedia.org/wiki/Homeostasis (accessed February 2, 2011) ("Wikipedia Homeostasis").

spreads. With wider quoted spreads, more market participants would be incentivised to post liquidity because the profit to be earned from posting liquidity would be greater. This, in turn, would have the negative feedback effect of increasing the volume of quotes and narrowing spreads.

Conversely, if more market participants were to adopt trading strategies that involve order display, the result would be a narrowing of quoted spreads. With narrower quoted spreads, fewer market participants would be incentivised to post liquidity, which would have the negative feedback effect of widening spreads.

If the proportionate use of non-displayed liquidity were expanding to the detriment of displayed liquidity, we would presumably see a widening of quoted spreads over an extended period of time. However, a Consultation Paper recently issued by the Australian Securities and Investments Commission concludes that "bid-ask spreads . . . have fallen in many jurisdictions, including Australia." Australia."

When we refer to an equilibrium between displayed and non-displayed liquidity, we do not mean that the ratio of displayed to non-displayed liquidity will remain constant over time, but rather that the ratio will continue to vary within its historical range. There will be periods when short-term traders are more active in the market; and there will be periods when long-term investors are more active in the market. This could shift the ratio of displayed to non-displayed liquidity somewhat during specific time periods, but quoted spreads and other market forces act as "negative feedback" mechanisms to maintain this ratio within or close to its historical range. 35

Principle 2: Information regarding trades, including those executed in dark pools or as a result of dark orders entered into transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that the trade resulted from a dark order.

We agree that the price and quantity of all trades should be made transparent to the public after execution.

We have spoken with many of our institutional customers globally as to whether dark venues should be identified to the public in execution reports. In the United States, the significant

³⁴ "ASIC Consultation Paper 145 – Australian equity market structure: Proposals," November 2010, http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/cp-145.pdf (accessed February 2, 2011), p. 19.

³⁵ Wikipedia provides numerous examples of "negative feedback" mechanisms: "A simple and practical example is a thermostat. When the temperature in a heated room reaches a certain upper limit the room heating is switched off so that the temperature begins to fall. When the temperature drops to a lower limit, the heating is switched on again. Provided the limits are close to each other, a steady room temperature is maintained. Similar control mechanisms are used in cooling systems, such as an air conditioner, a refrigerator, or a freezer." Wikipedia Negative Feedback. "Another good example of negative feedback mechanism is temperature control. The hypothalamus, which monitors the body temperature, is capable of determining even the slightest of variation of normal body temperature (37 degrees Celsius). Response to such variation could be stimulation of glands that produces sweat to reduce the temperature or signaling various muscles to shiver to increase body temperature." Wikipedia Homeostatis.

majority of our customers oppose this type of identification because of their concern that this type of public identification could reveal information to short-term traders regarding an institutional block order.

In other jurisdictions, such as Europe, there is a difference of opinion among institutional traders. Some traders in Europe support real-time identification to the public of where trades are executed because it facilitates their ability to source liquidity in the market. Other traders in Europe are concerned that this type of publication could reveal information to short-term traders.

With regard to the question of whether it should be publicly identified that a trade resulted from a dark order, every institutional trader with whom we have spoken is opposed to this proposal. The primary concern of institutional traders is that this would reveal information to short-term traders without any countervailing benefit.

Our recommendation is that each IOSCO member give careful consideration to the views of the institutional customers in its jurisdiction to ensure that their concerns are taken into account.

Principle 3: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

We support the principle that transparent markets should provide priority to transparent orders over dark orders. The question is whether this should be determined by each individual market operator or mandated by regulation? We recommend that the priority of orders be determined by the individual market operator, subject to the condition that the market operator establishes priority rules and makes clear and prominent disclosure of those rules. For example, a marketplace that focuses on efficient execution of large block orders should have the right to prioritize execution of block orders, as long as appropriate disclosure is provided.

Our position on this issue is based on our belief that different marketplaces serve different functions, and there is no "one size fits all" marketplace that can address the needs of every investor group. For example, Liquidnet's average negotiated execution size for U.S. securities is \$1,407,105 principal value.³⁶ This is 155 times larger than the average execution size on the New York Stock Exchange, which is \$9,104 principal value.³⁷ It is clear from this data that different marketplaces serve different functions. Rules that restrict the flexibility of marketplaces to address the needs of specific groups of marketplace participants can be detrimental to those participants.

We also support maximum flexibility for marketplaces to adopt rules that incentivise the display of liquidity.

Principle 4: Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

³⁶ Liquidnet trading data for Q4 2010.

³⁷ NYSE Data for Q4 2010.

We support Principle 4. We also support reporting of order and trade data to regulators as proposed in a recent SEC rule proposal.³⁸ This reporting is necessary to ensure that regulators have the necessary data to detect and protect market participants against market manipulation, insider trading and other activities that would constitute market abuse.

Principle 5: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

We support Principle 5. All dark pools and transparent markets should have an obligation to provide customers with clear disclosure regarding the handling of customer orders. At Liquidnet, we are focused on providing clear and detailed disclosure to our global customers regarding how our system operates and how we handle customer orders. Institutional brokers similarly should provide clear disclosure regarding the handling of customer orders. Regulators should take into consideration the recommendations of institutional investors on this issue.

Principle 6: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

We support Principle 6, though we believe Principle 6 should be modified to clarify that regulators also should continue to monitor the challenges faced by institutional investors in executing large orders and the role of block crossing networks in helping to address these challenges. Any regulations that seek to mandate pre-trade transparency should focus on smaller orders and not institutional block orders.

Regulators should continue to focus on the issue of non-displayed liquidity. It is very important that data to support regulatory changes be provided and carefully analysed before new restrictions are implemented, because any restrictions on the ability of buy-side institutions to execute large block orders without exposing their order information will mean higher trading costs for long-term investors and the hundreds of millions of individual investors globally for whom they invest.

³⁸ See Securities and Exchange Act Release No. 62174, May 26, 2010, http://sec.gov/rules/proposed/2010/34-62174, pdf (accessed February 2, 2011).



Conclusion

We appreciate the opportunity to comment on the Consultation. We hope that the members of IOSCO will keep in mind that what matters foremost is protecting the hundreds of millions of long-term investors globally who invest in equities through collective investment vehicles.

Very truly yours,

Seth Merrin, Chief Executive Officer
John Barker, Head of Europe, Middle East and Africa
Robert Young, Head of Canada
Lee Porter, Head of Asia Pacific
Howard Meyerson, General Counsel
Vlad Khandros, Corporate Strategy

The benefits of systems that facilitate block trading on behalf of long-term investors - comments from institutional investors and industry experts globally

Systems that facilitate the execution of institutional block orders with reduced market impact reduce trading costs for institutions. The cost savings achieved by institutions through these systems are passed on to hundreds of millions of individual investors globally who invest for the long-term through mutual funds, retirement funds, unit and investment trusts, and other collective investment vehicles.

This document presents written public statements from buy-side institutions, buy-side trade groups, regulators and industry experts on the value of systems that facilitate execution of institutional block orders on behalf of long-term investors.

This category of systems include systems like Liquidnet that focus on execution of block orders. It also includes broker-operated dark pools, sometimes referred to as "broker crossing networks." Many of these systems execute block and non-block orders. In this Exhibit, we focus specifically on the value of these types of systems for executing institutional block orders.

As emphasized by the U.S. Securities and Exchange Commission in its 2010 "Concept Release on Equity Market Structure," the protection of long-term investors is a top priority:

"In assessing the performance of the current equity market structure and whether it is meeting the relevant Exchange Act objectives, the Commission is particularly focused on the interests of long-term investors. These are the market participants who provide capital investment and are willing to accept the risk of ownership in listed companies for an extended period of time.

. . . .

Given the difference in time horizons . . . the trading needs of long-term investors and short-term professional traders often may diverge. Professional trading is a highly competitive endeavor in which success or failure may depend on employing the fastest systems and the most sophisticated trading strategies that require major expenditures to develop and operate. Such systems and strategies may not be particularly useful, in contrast, for investors seeking to establish a long-term position rather than profit from fleeting price movements.

¹ Institutions that invest and trade on behalf of mutual funds and other long-term investors are often referred to as "buy-side institutions".

Where the interests of long-term investors and short-term professional traders diverge, the Commission repeatedly has emphasized that its duty is to uphold the interests of long-term investors."²

This document is broken out into five sections – Europe; U.S.; Canada; Australia; and IOSCO.

Europe

In November 2008, the Committee of European Securities Regulators (CESR) published a "Call for evidence on the impact of MiFID on secondary markets functioning," (CESR 2008) seeking feedback from market participants in Europe on the impact of the Markets in Financial Instruments Directive (MiFID).³ As part of this process, CESR solicited feedback from market participants on various topics relating to the secondary markets, including dark pools.

The significant majority of responding parties, including many buy-side market participants who invest on behalf of tens of millions of European citizens, identified the benefits of dark pools for executing large orders.

The European Banking Federation, whose membership includes approximately 5,000 European banks,⁴ wrote:

"Dark pools have an important role in that they allow the execution of large orders without creating a market impact. Pre-trade transparency requirements for such types of orders would otherwise lead to artificial price distortion. I.e., without the possibility of trading in dark pools the investor would be forced to execute the transaction in tranches."

The Association of British Insurers, the voice of the insurance and investment industry with members constituting over 90 per cent of the insurance market in the UK and twenty per cent across the EU, wrote:

"Our members believe there are benefits to the dark pools of liquidity, namely the reduction of market impact as CESR highlights. Portfolio managers often

²Securities Exchange Act Release No. 61358 (January 14, 2010) 75 FR 3594 (January 21, 2010), http://sec.gov/rules/concept/2010/34-61358fr.pdf (accessed February 2, 2011), pp. 33-34 ("SEC Concept Release").

³ Ref. CESR/08-872, 3 November 2008.

⁴http://www.ebf-fbe.eu/ (accessed February 2, 2011).

⁵"EBF Response to CESR Call for Evidence on the Impact of MiFID on Secondary Markets Functioning", 9 January 2009, http://www.esma.europa.eu/popup_responses.php?id=4425 (accessed February 2, 2011).

trade in large sizes so minimising market impact – and thus reducing the cost of trading - is of great importance to them."

The Investment Management Association, the trade body for the UK's asset management industry, wrote:

"IMA members believe that dark pools are helpful in trading large blocks of stock particularly in minimising market impact and in achieving best execution."⁸

In 2010 CESR published three papers soliciting comments on various issues relating to MiFID (CESR 2010). In response to the CESR 2010 consultation papers, buy-side firms and buy-side industry groups were uniform in their support for systems that facilitate execution of block orders.

The European Fund and Asset Management Association (EFAMA), the representative association for the European investment management industry, wrote:

"Crossing networks fulfill an important role for institutional investors, enabling them to minimize market impact and opportunity cost for large orders." ¹⁰

The Association of British Insurers wrote:

"[F]or investors trading in size, total transparency is not always a panacea. Some kind of hidden liquidity has always existed as is the case now with dark pools and broker crossing networks.... The trade size has decreased and our members sometimes have to balance the trade-off between total transparency when using regulated markets open to high frequency traders and others, and

⁶ "Call for evidence on the impact of MiFID on secondary market functioning - The ABI's Response to CESR 08-872", January 2009, http://www.esma.europa.eu/popup_responses.php?id=4436 (accessed February 2, 2011).

⁷ www.investmentuk.org (accessed February 2, 2011).

⁸ "Call for Evidence on the Impact of MiFID on Secondary Market Functioning", 8 January 2009.

⁹"CESR Technical advice to the European Commission in the context of the MiFID review – Transaction Reporting - CESR 10-292", 13 April 2010, http://www.cesr.eu/data/document/10_796.pdf (accessed February 2, 2011). "CESR Technical advice to the European Commission in the context of the MiFID review – Equity Markets - CESR 10-394", 13 April 2010, http://www.cesr.eu/data/document/10_975.pdf (accessed February 2, 2011). "CESR Technical advice to the European Commission in the context of the MiFID review – Investor protection and Intermediaries – CESR 10-417", 13 April 2010, https://www.cesr.eu/popup2.php?id=6544 (accessed February 2, 2011).

Letter dated 1 June 2010 from Peter De Proft, European Fund and Asset Management Association, "EFAMA

Tetter dated 1 June 2010 from Peter De Proft, European Fund and Asset Management Association, "EFAMA Reply to CESR's Consultation Paper on Technical Advice to the European Commission in the context of the MiFID review – Equity Markets," http://www.esma.europa.eu/index.php?page=response-details&c_id=161&r_id=5648 (accessed February 2, 2011).

decreased market impact and liquidity for large orders when trading over the counter, whether in dark pools or crossing networks."¹¹

The Association of British Insurers wrote further:

"Institutional investors such as our members, trading on behalf of their clients who are policyholders or pensioners, are significant users of dark pools. They do this because they believe that is where they can achieve best execution for some orders. That, in turn, is because being able to transact in size away from lit markets reduces the market impact and therefore transaction costs." 12

Fidelity International Limited (FIL) wrote:

"Dark venues provide significant benefits to institutional clients' whose flow tends to be large in size. Benefits include reduced market impact, lower information leakage and larger fills than on traditional public and light alternatives."

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FIL further pointed out:

"Institutional investors benefit from broker crossing networks / dark pools and we are opposed to any signaling from them to the lit market that may increase our cost to trade." 14

Wellington Management Company wrote:

"As a fund manager, we routinely use broker crossing networks (BCNs) for large orders to avoid market impact that might arise if other market participants were to trade ahead of our orders. We generally instruct firms not to display our orders where such non-display is judged to benefit execution quality." ¹⁵

Other market participants in Europe concur with the views of the buy-side as to the benefits of crossing systems that trade large orders. In response to CESR 2008, NYSE Euronext wrote:

¹¹ ABI Response to the CESR Consultation on Equity Markets,

http://www.esma.europa.eu/popup_responses.php?id=5538 (accessed February 2, 2011), p. 2 ("ABI 2010 Letter"). ¹²ABI 2000 Letter, p. 11.

FIL response to CESR's Consultation Paper on Technical Advice to the European Commission in the context of the MiFID Review – Equity Markets, http://www.esma.europa.eu/popup responses.php?id=5616 (accessed February 2, 2011), p. 1 ("FIL Letter").

¹⁴ FIL Letter, p. 7.

Wellington Management Company Letter to Committee of European Securities Regulators, CESR Technical Advice to the European Commission in the Context of the MiFID Review – Equity Markets, Ref: CESR/10-394 (May 31, 2010), http://www.esma.europa.eu/popup_responses.php?id=5512 (accessed February 2, 2011), p. 4.

"The trend towards smaller execution sizes in central 'lit' order books boosts the demand for alternative trading models. Dark pools respond to this demand by offering the industry a place for trading large orders with minimal impact on prices and allow professional investors to search counterpart[ies]. Therefore, we strongly believe that there are benefits in offering services complementary to order books."

In response to CESR 2010, the London Stock Exchange plc and Borsa Italiana identified the benefits of dark pools for executing large orders without market impact:

"Whilst participants want and need sufficient transparency to create market confidence, this should not undermine their ability to deliver an investment return to end customers or to achieve execution certainty for larger orders without adverse market impact. Therefore, allowing non-displayed trading to take place within the parameters of the appropriate waivers is essential to provide choice and flexibility for end investors, without undermining the execution certainty of displayed orders and at the same time preserving the competitiveness of public order books." ¹⁷

Steve Grob, Director of Group Strategy at Fidessa (London), a technology vendor, remarked recently in a Finextra article:

"The concept that dark pools are 'always bad' is naive on a number of levels. Firstly, the term 'dark pools' covers a whole host of different non-lit order matching services. These range from buy-side crossing networks, through discretionary broker services, to dark books operated by exchanges and MTFs. These different pools offer a range of different services to professional investors so that they can minimise market impact and achieve the best possible outcome for their orders. Secondly, the concept of trading off-exchange — or 'in the dark' — has existed for as long as the exchanges themselves. Many of the broker dark pools are simply automated versions of their traditional 'upstairs' activity that seek to deliver on the brokers' fiduciary duty to get the best possible outcome for their clients. For many pension and traditional long-only funds the idea that they can, or should, trade the huge blocks they do on lit markets is bizarre. Take Liquidnet, for example, which prints average trade sizes that are hundreds or thousands of times larger than trades in the same stocks on lit markets."

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¹⁶"Comments from NYSE Euronext in Response to CESR's Call for Evidence on the Impact of MiFID on Secondary Markets Functioning (CESR/08-872)", January 2009, http://www.esma.europa.eu/popup_responses.php?id=4464 (accessed February 2, 2011).

¹⁷ "LSEG Response to CESR MiFID Consultation Paper 10-394 – Equity Markets", 28 May 2010, http://www.esma.europa.eu/popup_responses.php?id=5426 (accessed February 2, 2011), p. 2.

¹⁸Steve Grob, "Brussel Spouts", *Finextra*, November 26, 2010,

http://www.finextra.com/community/fullblog.aspx?id=4755 (accessed February 2, 2011).

Buy-side traders in Europe and the U.S. have specifically identified Liquidnet as an example of a trading venue that reduces execution costs for their block orders.

Kevin Chapman, Managing Director of Nicholas-Applegate Capital Management, stated:

"I'd rather see the traders using aggregators like. . . Liquidnet. . . because that would tell me they're sourcing their own liquidity and trying to get a good execution." ¹⁹

Kristian West, Head of Equity Trading, JP Morgan Investment Management, stated:

"Overall, we use a relatively small subset of firms to access the fragmented pools of liquidity. These are platforms we trust. For example, we have access to Liquidnet and that for us is an opportunity to cross liquidity 'upstairs' before it hits the market."²⁰

Kay Swinburne, an MEP from Wales, the European Conservatives and Reformists (ECR) Group's Coordinator on the Economics and Monetary Committee in the European Parliament and the ECR Group's Coordinator on the Special Committee on the Financial, Economic and Social Crisis, recently commented favorably on Liquidnet and other systems that seek to address the specific needs of long-term investors:

"I have been watching the development of NASDAQ OMX's latest US equity platform that has a minimum size order threshold, rewarding size not frequency of trade, as well as the progress of buy-side only MTFs like Liquidnet that choose to build in latency to their systems in order to filter participants wishing to access their systems.

Both of these methods have been discussed by regulators on both sides of the Atlantic, yet thankfully, no one has looked to impose blanket solutions to entire markets. The more market solutions and options for investors that spring up to fill the gap between the perceived weaknesses in the market and its ability to serve its primary purpose, the less regulation we will need to come up with to fill the void."

¹⁹"TCA plugs you into the front office", *Buy-Side Technology*, November 1, 2009, http://db.riskwaters.com/public/showPage.html?validate=0&page=bst_login&url=%2Fpublic%2FshowPage.html%3Fpage%3D870805 (accessed February 2, 2011).

³Fpage%3D870805 (accessed February 2, 2011).

20"(What doesn't kill you . . .", The Trade, December 1, 2009, http://www.thetradenews.com/what-doesn%E2%80%99t-kill-you-%E2%80%A6 (accessed February 2, 2011).

In this passage, MEP Swinburne suggests that regulators should look favorably upon "market solutions" like Liquidnet that seek to address specific problems in the market. Liquidnet provides a market solution to address the challenges faced by institutions in executing block orders on behalf of long-term investors.

United States

Mary L. Schapiro, Chairman of the U.S. Securities and Exchange Commission, stated on December 8, 2010 in testimony before two U.S. Senate sub-committees:

"Many institutional investors value the opportunity to trade in dark venues because of a fear that trading in the public markets in large sizes will cause prices to run away from them. We will explore all aspects of this issue to reach a balanced conclusion. At the end of the day, investors of all types must have confidence that our market structure provides high-quality price discovery and the tools they need to meet their investment objectives in a fair and efficient manner."²¹

In its "Concept Release on Equity Market Structure" issued in 2010 (the SEC Concept Release), the U.S. Securities and Exchange Commission (SEC) identified the benefits of systems that facilitate the execution of large institutional orders.²² The SEC wrote:

"In general, dark pools offer trading services to institutional investors and others that seek to execute large trading interest in a manner that will minimize the movement of prices against the trading interest and thereby reduce trading costs."²³

The SEC wrote further:

"An important objective of many dark pools is to offer institutional investors an efficient venue in which to trade in large size (often by splitting a large parent order into many child orders) with minimized market impact."²⁴

²¹ Testimony by Mary L. Schapiro, Chairman of the U.S. Securities and Exchange Commission, on December 8, 2010 before the Subcommittee on Securities, Insurance, and Investment of the United States Senate Committee on Banking, Housing, and Urban Affairs and the United States Senate Permanent Subcommittee on Investigations in recent testimony on U.S. Equity Market Structure by the U.S. Securities and Exchange Commission, http://www.sec.gov/news/testimony/2010/ts120810mls.htm (accessed February 2, 2011).

²² SEC Concept Release.

²³ SEC Concept Release, p. 18.

²⁴ SEC Concept Release, p. 68.

In their comment letters on the SEC Concept Release, buy-side institutions expressed similar views regarding the value of systems that facilitate execution of block orders.

According to the Investment Company Institute, the national association of U.S. investment companies whose members serve almost 90 million shareholders,

"Funds have long been significant users of undisplayed liquidity and the trading venues that provide such liquidity. These venues provide a mechanism for transactions to interact without displaying the full scale of a fund's trading interest, thereby lessening the cost of implementing trading ideas and mitigating the risk of information leakage. These venues also allow funds to avoid transacting with market participants who seek to profit from the impact of the public display of large orders to the detriment of funds and their shareholders. As we have stated in several letters to the Commission, the confidentiality of information regarding fund trades is of significant importance to Institute members. Any premature or improper disclosure of this information can lead to front-running of a funds' trades, adversely impacting the price of the stock that the fund is buying or selling.

. . .

We therefore believe it is imperative that venues trading undisplayed liquidity remain available to funds. We would be concerned if any Commission proposal impeded funds as they trade securities in venues providing undisplayed liquidity, whether it be through trading large blocks or through other trading methods."²⁵

The Investment Adviser Association, a not-for-profit association that represents the interests of investment adviser firms that are registered with the SEC, wrote:

"In this regard, dark pools have been critically important in assisting investment managers to minimize market impact costs. These dark pools have permitted large orders to be executed without publicly disseminating the investment manager's trading interests and strategy. We agree with many of the comments to the Commission's proposal to regulate non-public trading interest that trading venues providing undisplayed liquidity are important trading centers for asset managers that seek to minimize market impact (both implicit and explicit) costs for their client trades."²⁶

The Vanguard Group, Inc. wrote,

Letter dated April 21, 2010 from Karrie McMillan, General Counsel, Investment Company Institute, http://sec.gov/comments/s7-02-10/s70210.shtml (accessed February 2, 2011), pp. 12-13.

Letter dated April 20, 2010 from Jennifer S. Choi, Assistant General Counsel, Investment Adviser Association, http://sec.gov/comments/s7-02-10/s70210.shtml (accessed February 2, 2011), p. 2.

"Vanguard believes large block crossing networks that match large institutional clients at prices between the NBBO play a valuable role in today's markets." 27

T. Rowe Price Associates, Inc. wrote,

"Almost all institutional investors, including T. Rowe Price, utilize trading venues that allow access to undisplayed liquidity. T. Rowe Price strongly takes the position that these 'dark pools' are a vital tool for institutional investors with large blocks of stock to buy and sell. Institutional investors highly value the specialized size discovery mechanisms that bring large buyers and sellers in the same stock together anonymously and to facilitate a trade between them. We would not be supportive of any regulation that negatively impacts our ability to access these pools of undisplayed liquidity." ²⁸

The Security Traders Association of New York, Inc., the largest affiliate of the Security Traders Association, a professional association of buy-side and sell-side traders, wrote:

"As the Commission has acknowledged there is a need for targeted size discovery mechanisms that enable investors to trade efficiently in size orders and undisplayed liquidity is often used by those wishing to avoid adverse market impact when executing their trades.

. . . .

We do not believe that the existence of undisplayed liquidity has materially harmed price discovery. Despite the existence of ATSs and dark pools displayed markets continue to prosper. The best measure of price discovery is quoted spreads. If there is not enough incentive to post limit orders, the result would be a widening of quoted spreads because intermediaries would charge more to post limit orders. But all the data shows that quoted spreads are narrowing. The narrowing of quoted spreads directly contradicts the assertion that dark pools or internalization are negatively affecting price discovery. The aggregate market share of lit markets as a percentage of overall market volume has remained relatively constant over time.

. . . .

We have repeatedly heard that institutions representing long term investors through mutual funds feel it is imperative that the choice of interacting in the

²⁷ Letter dated April 21, 2010 from George U. Sauter, Managing Director and Chief Investment Officer, The Vanguard Group, Inc., http://sec.gov/comments/s7-02-10/s70210.shtml (accessed February 2, 2011), p. 5.

²⁸ Letter dated April 21, 2010 from Michael Gitlin, Head of Global Trading, David Oestreicher, Chief Legal Counsel, and Christopher P. Hayes, Senior Legal Counsel, T. Rowe Price Associates, Inc., http://sec.gov/comments/s7-02-10/s70210.shtml (accessed February 2, 2011), p. 3.

public markets be left with the investment professional making investment decisions."²⁹

Fidelity Investments expressed a similar view in its response to the SEC's rule proposal on "Regulation of Non-Public Trading Interest"³⁰:

"Fidelity uses a wide variety of trading venues and trading strategies to execute client orders as efficiently as possible, and we do not favor one type of trading business model or trading venue over others. On balance, we believe that a framework that supports multiple, competing trading venues is good for the securities industry. Dark pools (and other dark sources of liquidity) enable large market participants to shield their trading objectives by placing orders without having to display their full trading intentions to the entire market. As a result, dark pools can reduce transaction costs by limiting potential information leakage and associated market impact that can occur when trading significant blocks of stock. Fidelity believes that these dark pools are important tools that enable us to execute trades efficiently while protecting our long-term investors from potentially opportunistic trading strategies." 31

In a September 24, 2009 speech, Paul Schott Stevens, the President of the Investment Company Institute, discussed the importance of controlling market impact costs. Mr. Stevens defined market impact as "the amount by which the price of a stock moves against the trader during the time it takes to execute the trade." "The bigger the trade," Mr. Stevens said, "the greater the risk of an adverse price movement." According to an article reporting on his remarks, "Mr. Stevens noted that the development of new venues for trading, such as dark pools, have helped funds reduce their trading costs." **

The views of the buy-side have been echoed by other market participants and by many of the leading industry experts on trading and market structure and by academics with expertise on trading and market structure.

Letter dated April 30, 2010 from Kimberly Unger, Executive Director, The Security Traders Association of New York, Inc., http://sec.gov/comments/s7-02-10/s70210.shtml (accessed February 2, 2011), p. 10-11.

³⁰Securities Exchange Act Release No. 60997 (November 13, 2009), 74 FR 224 (November 23, 2009), http://sec.gov/rules/proposed/2009/34-60997fr.pdf (accessed February 2, 2011).

³¹ Letter dated February 23, 2010 from Scott C. Goebel, Senior Vice President, General Counsel, FMR Co., http://sec.gov/comments/s7-24-09/s72409.shtml (accessed February 2, 2011), p. 2.

³² "ICI Wants Wider Debate On Markets", *Compliance Reporter*, December 4, 2009, http://www.compliancereporter.com/SubContent.aspx?ArticleID=2352170 (accessed February 2, 2011) ("Compliance Reporter").

³³ Compliance Reporter.

³⁴ Compliance Reporter.

Robert Greifeld, Chief Executive Officer of Nasdaq, the world's largest electronic stock exchange, stated as follows in response to a question on dark pools during a recent television interview with Steve Forbes, the owner and editor-in-chief of *Forbes* magazine:

"... a dark pool that's doing a large size, that's clearly a value added, because we know today that if you come into the lit market with larger size, you have a disproportionate impact on the lit market."³⁵

According to a report by the TABB Group, a research and consulting firm that conducts extensive research on trading and markets,

"... institutional investors tend to keep their trades quiet and not telegraph their intentions. Many investors feel that by placing limit orders or showing their hand, they will leak information into the market and invite other traders to take advantage of them." 36

The TABB Group report wrote similarly in another report:

"In fact, there are numerous executions that fall between 2,000-9,000 shares. This subcategory of blocks, sometimes referred to as the 'demi-block,' has grown over the past few years. These prints are significantly larger than the average 300 share print found on most liquidity venues, but smaller than the traditional over 10,000 share blocks. Even some volume from traditional block dark pools falls into this segment. Trades within this category can have just as much market impact as those at the 50,000 share range."

Quantitative Services Group, a provider of advanced trading analytics and investment consulting services, wrote similarly in a recent report:

"It's well known that sophisticated stat-arb models routinely monitor market data and the depth of limit order books to detect asymmetries in trading interests. The goal is to exploit and profit from them before the flows reverse and larger traders have a chance to finish their orders. These HFT strategies increase the costs of completing institutional trades and often introduce

³⁵"Interview with Robert Greifeld, Intelligent Investing with Steve Forbes," December 3, 2010, http://www.forbes.com/2010/12/03/greifeld-nasdaq-psx-intelligent-investing-video.html?partner=daily_newsletter (accessed February 2, 2011).

³⁶ Adam Sussman, Larry Tabb, and Robert lati, The TABB Group, LLC, "US Equity High Frequency Trading: Strategies, Sizing and Market Structure", September 2009, p. 22.

³⁷ Matthew Simon, The TABB Group, LLC, "US Equity Trading 2010/2011: Outflows, Outrage, and Balance", December 2010, p. 40.

'adverse selection' as orders are completed in names that are moving contrary to the institutional trader's investment goals."³⁸

According to Wayne Wagner, Chairman of Plexus Group, a pioneer in transaction cost analysis for institutional investors, in testimony before the United States Congress in March 2003:

"For institutional trades to squeeze through the market, they must be ground down to a size that can be accommodated in the market. In the process, the time to complete the order necessarily lengthens.

This creates opportunities for market insiders and middlemen to make money through unnecessary inter-positioning and parasitical front-running. The resulting delay and impact costs reduce investment performance.

The best market for small investor trades may not serve very well those same small investors who invest via mutual funds and other co-mingled investments. Facilities where large buyers can meet large sellers without leakage will benefit all investors."³⁹

According to Professor Robert Schwartz, Marvin M. Speiser Professor of Finance and University Distinguished Professor at the Zicklin School of Business, Baruch College, CUNY,

"As noted, quantity discovery is a major function of a marketplace. While a market center such as the NYSE may play the dominant role with regard to price discovery, an ATS such as Liquidnet or ITG's Posit can play a major role with regard to quantity discovery. These systems do so by enabling large buyers and sellers to meet directly.

An ATS's quantity discovery role can beneficially effect price discovery for the broader marketplace. If restrictions are placed on how large buy orders can meet large sell orders away from a primary market center, price dislocations can occur. That is, elephants that are not able to trade with each other can upset the apple cart (or, some might say, the alpha cart) and cause a sharp accentuation of intra-day price volatility."⁴⁰

According to Benn Steil, Senior Fellow in International Economics at the Council on Foreign Relations,

"The problem is that continuous electronic auction markets, as useful as they are, have flaws that are apparent to any institutional trader. They require

Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises, United States House of Representatives, Washington, D.C., March 12, 2003, p. 6.

³⁸ Quantitative Research Group LLC, "Beware of the VWAP Trap", Research Note, November 2009, p. 3.
³⁹ Wayne H. Wagner, Chairman of Plexus Group, Testimony before the Committee on Financial Services,
Subcommittee on Capital Markets. Insurance and Government Sponsored Enterprises. United States House on

⁴⁰Robert A. Schwartz, "The Trade-Through Rule Must Go", Securities Industry News, February 14, 2005.

institutional-sized orders to be chopped up into small bits, each often as little as 1 percent of actual order size, and executed over days or weeks in order to avoid huge market impact costs. That's why in every major U.S. or European marketplace -- New York, Nasdaq, London, Frankfurt, Paris -- about 30 percent of trading volume is executed in blocks, "upstairs," away from these systems.

More importantly, new electronic systems are expanding to make this block trading more efficient. Liquidnet is the most prominent example. By foreswearing limit-order display, or 'pre-trade transparency,' in favor of a structure in which potential matches are revealed only to the relevant buyer and seller, institutions are encouraged to reveal their true order size to the system."

Dr. James J. Angel, Associate Professor at the McDonough School of Business at Georgetown University, an expert on the structure and regulation of global financial markets, recently explained as follows in a comment letter on the SEC's Concept Release:

"Large traders have always been concerned about reducing the price impact of their trades. One of the ways to do this is to limit exposure of their trading interest only to parties who are very likely to trade with them. This limited disclosure reduces the likelihood that other traders will try to go along and trade at the same time and increase the market impact of the order. Whether in the murky depths of the ancient NYSE floor, or in the telephone conversations of upstairs block traders, limited disclosure is a longstanding and useful practice. The so-called 'dark pools' along with other innovations provide automated ways for traders to execute their trades better, faster, and cheaper. The exchanges themselves facilitate this selective disclosure through their hidden order facilities.

In reality, there is no such thing as a truly 'dark pool' in the U.S. Immediately after a trade takes place in the U.S., the lights are turned on and the entire world can find out the price and quantity of the trades within seconds. This last sale information is extremely important in price discovery.⁴²

In an academic study on equity trading in the 21st Century,⁴³ Professor Angel, Professor Lawrence E. Harris (Fred V. Keenan Chair in Finance, Professor of Finance and Business Economics, Marshall

⁴¹Benn Steil, "The End of History and the Last Trading System, Fukuyama Comes to Market Reg", *Securities Industry News*, March 28, 2005.

⁴² Letter dated April 30, 2010 from James J. Angel, Ph.D., CFA, Associate Professor of Finance, Georgetown University, McDonough School of Business, http://www.sec.gov/comments/s7-02-10/s70210-172.pdf (accessed February 2, 2011), pp. 6-7.

⁴³ James J. Angel, Lawrence E. Harris, Chester S. Spatt, "Equity Trading in the 21st Century", February 23, 2010, http://www.knight.com/newsroom/pdfs/EquityTradinginthe21stCentury.pdf (accessed February 2, 2011) ("Angel, Harris and Spatt").

School of Business, University of Southern California, and Chief Economist of the SEC from July 2002 through June 2004), and Professor Chester S. Spratt (Pamela R. and Kenneth B. Dunn Professor of Finance, Director, Center for Financial Markets, Tepper School of Business, Carnegie Mellon University, and Chief Economist of the SEC and Director of its Office of Economic Analysis from July 2004 through July 2007), wrote:

"Brokers and others have developed many alternative trading systems to help large traders arrange trades and enhance liquidity provision, while protecting these traders from front-running and quote-matching problems that arise when information about their orders is widely known. Larger traders are anxious to protect the intellectual property and privacy of their trading plans. In a trading floor context, these trades previously used floor brokers who worked their orders based on their experience. Now many large traders use dark pools instead."

* * * * *

Several prominent legislators in the U.S. have recognized the value and role played by dark pools. In a letter to SEC Chairman Mary Schapiro, Democratic Senator Charles Schumer wrote,

"... I recognize the important role that certain ATSs fulfill by executing large block orders on behalf of institutional investors in a non-display environment, and I would urge the Commission to consider an exception to the one-percent threshold as may be necessary to facilitate such block execution services."

Democratic Senator Jack Reed noted at a US Senate subcommittee hearing on market structure that,

"Dark pools and other undisplayed forms of liquidity have been considered useful to investors moving large numbers of shares since it allows them to trade large blocks of shares of stock without giving others information to buy or sell ahead of time."

Republican Senator Bob Corker similarly noted at the hearing:

"... it seems to me that the dark pools are an outgrowth of electronic exchanges where people are trying to sell large blocks of shares in a way that used to be done by individuals, so if we're going to be almost all electronic

⁴⁴ Angel, Harris and Spatt, p. 35.

⁴⁵ Letter dated October 20, 2009 from Senator Charles Schumer to Chairman Mary Schapiro, http://schumer.senate.gov/new_website/record.cfm?id=316252 (accessed February 2, 2011), p. 4.

⁴⁶Transcript of the Hearing of the Securities, Insurance and Investment Subcommittee of The Senate Banking, Housing and Urban Affairs Committee on "Dark Pools, Flash Orders, High Frequency Trading and Other Market Structure Issues," October 28, 2009, pp. 1-2 ("Senate Subcommittee Hearing Transcript").

exchanges . . . what is another mechanism for large institutional traders with large blocks of stock? What is a fairer way for them to be able to make those types of trades without moving the market substantially and really harming the very people they're investing for? What is a better mechanism than a dark pool?"⁴⁷

The National Investor Relations Institute, the largest professional investor relations association in the world representing 2,000 publicly held companies, wrote similarly in response to the SEC's Concept Release:

"In today's market structure, dark pools provide an important function for investors by allowing large block trading with efficiency and anonymity. NIRI urges the SEC to proceed with a thorough understanding of dark pools' price discovery role. If, for example, the proposed changes result in advantages to short term traders at the expense of long term investors, this does not foster fair, free markets for all participants in keeping with the SEC's mission and investor protection role. We appreciate the SEC's focus on large block orders by considering appropriate exceptions to facilitate execution of these large block orders. We also recommend the SEC continue to provide sufficient market flexibility to enable efficient execution of these types of orders."

Canada

In November 2010, the Canadian Securities Administrators (CSA) and Investment Industry Regulatory Organization of Canada (IIROC) issued a joint consultation paper on "Dark Liquidity in the Canadian Market." In response to the 2010 Joint CSA/IIROC Consultation Paper, Connor, Clark & Lunn Investment Management Ltd. described the value of dark pools for executing block orders:

"As we stated in our previous submission, we believe dark pools have served an important function in the market by facilitating the direct interaction between large investors. Dark pools have enabled investors to provide and source liquidity without directly disclosing order information in the quotes or to a broker, behaviors that could have substantial and adverse price consequences.

⁴⁸ Letter dated February 16, 2010 from Jeffrey D. Morgan, CAE, President and CEO, National Investor Relations Institute. http://sec.gov/comments/s7-24-09/s72409.shtml (accessed February 2, 2011), p. 2.

⁴⁷ Senate Subcommittee Hearing Transcript, p. 36.

⁴⁹ "Joint Canadian Securities Administrators / Investment Industry Regulatory Organization of Canada Consultation Paper 23-405 – Dark Liquidity in the Canadian Market", November 19, 2010, http://www.osc.gov.on.ca/documents/en/Securities-Category2/csa 20101119 23-405 dark-liquidity.pdf (accessed February 2, 2011).

For this reason, they have been a complement (not a replacement) to other execution venues in the Canadian market.

. . .

Imagine a scenario in which a block order was published in full in the lit market. The price impact associated with such publication could be far beyond what an investor would pay managing the order in the upstairs market. As a result, without the upstairs market, such large orders simply wouldn't exist. The upstairs block market does not reduce the transparency on the lit market because these orders would never be sent to the lit market to begin with. Thus there is no cost associated with a reduction in transparency and there is a clear transaction cost benefit to investors."⁵⁰

In December 2009, the CSA and IIROC issued a joint consultation paper on "Dark Pools, Dark Orders, and Other Developments in Market Structure in Canada." Buy-side firms and buy-side trade groups responding to the consultation paper consistently and uniformly identified the value of dark pools for executing block orders.

The Investment Counsel Association of Canada, which represents investment management firms registered to do business in Canada as portfolio managers, wrote as follows in its comment letter on the 2009 Joint CSA/IIROC Consultation Paper:

"Dark Pools serve an important function in the marketplace – ICAC believes that there is, and has always been, a need and a role in the marketplace for hidden (i.e. non-displayed) liquidity. With effective and efficient regulation, Dark Pools support the objective of best execution for investors." ⁵²

TD Asset Management Inc. wrote similarly:

"It is important for large asset managers to have at their disposal, a variety of tools, including Dark Pools and Dark Orders, to trade large blocks of securities without information leakage to the marketplace. In this regard, Dark Pools and

⁵⁰ Letter dated January 17, 2010 from Don Towers, Partner, Head of Equity Trading of Connor, Clark & Lunn Investment Management Ltd., http://www.osc.gov.on.ca/documents/en/Securities-Category2-Comments/com 20110117 23-405 drakej towersd.pdf (accessed February 2, 2011), pp. 4 and 6.

[&]quot;Joint Canadian Securities Administrators / Investment Industry Regulatory Organization of Canada Consultation Paper 23-404 – Dark Pools, Dark Orders, and Other Developments in Market Structure in Canada", December 15, 2009, http://www.osc.gov.on.ca/documents/en/Securities-Category2/ csa_20091002_23-404_consultation-paper.pdf (accessed February 2, 2011).

Letter dated December 22, 2009 from Katie Walmsley, President, and Mark Pratt, Chair, Industry, Regulation & Tax Committee of the Investment Counsel Association of Canada, Senior Legal Counsel, Mackenzie, http://www.osc.gov.on.ca/documents/en/Securities-Category2-Comments/com 20091222 23-404 walmsleyk.pdf (accessed February 2, 2011), pp. 2-3 ("ICA Letter").

Dark Orders benefit investors and our markets generally in many important ways by lowering trading costs, providing market participants more choice, and spurring competition among trading venues.

. . . .

Qualitatively, the positive attributes to Dark Pools include order anonymity that results in reduced market impact and lower trading costs.

. . . .

We believe that Dark Pools should not be required to provide pre-trade transparency of their orders based on a regulated threshold of trading activity, absent any measured benefit to mandating transparency to Dark Pools.

. . . .

In our view, Dark Pools generally benefit investors and markets by reducing trading costs, providing market participants additional trade execution venues, and encouraging innovation and competition among trading venues."⁵³

Highstreet Asset Management wrote in its comment letter:

"Dark Pools provide two benefits; a forum to execute larger trades with less pretrade information leakage; [and] more diversity in liquidity sources in that one is not locked to one broker for the order."⁵⁴

In its comment letter, Greystone Managed Investments focused on the importance of providing flexibility to the institutional trader in determining how to most efficiently execute a block order:

"Our submission therefore, takes the viewpoint of a large institutional investor. In this context, it is critical that we remain flexible in our trading decision to ensure we minimize market impact. Particularly for block trades, we need to minimize information leakage. As an institutional manager, we believe we need more flexibility and not less in deciding how we trade.

Institutional traders seek larger contras than are available in the displayed market. The largest cost of trading is the price impact of moving a large block of stock; therefore, greater flexibility is needed for institutional investors.

Letter dated December 15, 2009 from Barbara Palk, CFA, President of TD Asset Management, Inc., http://www.osc.gov.on.ca/documents/en/Securities-Category2-Comments/com 20091215 23-404 palk.pdf (accessed February 2, 2011), pp. 2-4 ("TD Letter").

Letter dated December 24, 2010 from Vidis Vaiciunas, Vice President, Head of Trading and Shaun Arnold, Chief Investment Officer of the High Street Asset Management, http://www.osc.gov.on.ca/documents/en/Securities-Category5-Comments/com 20091224 23-404 vaiciunasv.pdf (accessed February 2, 2011), p. 2.

Institutions need full discretion on how to trade their block orders. Institutions need more flexibility and not less in deciding who can see their block order information. Institutions are in the best position to determine how to execute their holdings. Dark pools should not be required to provide transparency of their orders. This allows for institutional managers to maintain anonymity and minimize information leakage."55

RBC Global Asset Management Inc. wrote that use of dark pools is consistent with an investment manager's best execution obligations:

"Investment managers have the fiduciary duty to obtain best execution for their clients. Therefore, the determination of how an order is executed is based on the investment manager's evaluation of which marketplace (transparent or non-transparent) will help the investment manager meet this obligation. Further, investment managers are charged with controlling transaction costs in order to deliver the best performance possible to their clients; this responsibility includes considering the cost of market impact made by an order if sent to a transparent marketplace. As discussed in the Consultation Paper, there are clear benefits in using a dark pool. They do assist investment managers in reducing the market impact of placing a large order made on behalf of multiple clients, thereby accessing better execution.

. . . .

As noted above, we generally use dark pools to trade orders that are particularly difficult to execute and to seek large blocks of liquidity while limiting the leakage of trade order information to the market. As well, dark pools are used for price improvement."⁵⁶

Connor, Clark & Lunn Investment Management Ltd. wrote:

"As a general comment, we believe Dark Pools serve an important function in the marketplace, and, for the most part, we are not in favor of introducing significant restrictions on how these venues operate. Dark pools enable investors to provide and source liquidity without directly disclosing order

Letter dated December 22, 2009 from Nadine Krenosky, CA, CFA, Chief Compliance Officer of Greystone Managed Investments, Inc., http://www.osc.gov.on.ca/documents/en/Securities-Category5-Comments/com 20091224 23-404 krenoskyn.pdf (accessed February 2, 2011), pp. 2-3 ("Greystone Letter").

Set Letter dated December 29, 2009 from Daniel E. Chornous, CFA of RBC Asset Management Inc., http://www.osc.gov.on.ca/documents/en/Securities-Category2-Comments/com 20091229 23-404 chornousd.pdf (accessed February 2, 2011), p. 2 ("RBC Letter").

information in the quotes or to a broker. For this reason, they are a complement - not a replacement - to other execution venues in the Canadian market."⁵⁷

Commenters were specifically asked for their views on how dark pools affect market liquidity. In response to this question, The Investment Counsel Association of Canada wrote:

"In our view, Dark Pools contribute positively to liquidity. If larger institutional investors can enter orders without fear of information leakage, then the hidden liquidity that exists on the desks and blotters of buy-side traders, or in their order management systems, is made available." ⁵⁸

TD Asset Management Inc., one of the largest asset managers in Canada, wrote similarly:

"We expect liquidity to be enhanced by Dark Pools. We neither expect a material impairment on price discovery nor any excessive market fragmentation." ⁵⁹

Greystone Managed Investments wrote:

"... the core benefit of dark pools is their ability to provide access to liquidity while minimizing market impact." 60

RBC Global Asset Management Inc. wrote:

"Dark pools provide institutional investors with the ability to seek the type of liquidity they are looking for without experiencing undue market impact. They offer institutional investors the potential to find adequate contra-side trading interest for large, potentially market-moving orders, without affecting prices.

. . . .

As noted above, we generally use dark pools to trade orders that are particularly difficult to execute and to seek large blocks of liquidity while limiting the leakage of trade order information to the market. As well, dark pools are used for price improvement."⁶¹

Connor, Clark & Lunn Investment Management Ltd. wrote:

⁵⁷ Letter dated January 5, 2010 from Don Towers, Partner, Head of Equity Trading of Connor, Clark & Lunn Investment Management Ltd., http://www.osc.gov.on.ca/documents/en/Securities-Category2-Comments/com 20100105 23-404 towersd.pdf(accessed February 2, 2011), p. 2 ("Connor Clark Letter").

⁵⁸ ICA Letter, pp. 2-3.

⁵⁹ TD Letter, pp. 2-4.

⁶⁰ Greystone Letter, pp. 2-3.

⁶¹ RBC Letter, p. 2.

"If anything, Dark Pools increase the liquidity available in the market by providing a way for investors to source liquidity that previously had only been available by calling a broker. Our desk is now able to find and provide liquidity without having to disclose any pre-trade information to a broker or the market as a whole.

. . . .

If the market share of Dark Pools in Canada were to increase, liquidity available in the market would also increase. Dark Pools can bring liquidity to the market that may not have otherwise come to the market."⁶²

Consistent with these comments, TD Newcrest, a securities dealer in Canada that provides research reports on the equity markets, has noted in a research report that institutional traders in Canada.

"... remain concerned over information leakage that results from sophisticated pattern recognition as well as aggressive strategies utilised by high frequency traders that are able to maneuver in the market much more nimbly than traditional traders." ⁶³

Australia

In 2007, the Australian Securities and Investments Commission (ASIC) issued "Consultation Paper 86 – Competition for market services, trading in listed securities and related data." (Consultation Paper 86). ⁶⁴ In Consultation Paper 86, ASIC requested comments from market participants on a series of market structure issues.

In response to Consultation Paper 86, the members of the institutional trading community in Australia wrote a joint letter discussing the problem of market impact costs and the role of block trading systems in addressing this problem:

"Pre-trade transparency is not desirable at all when executing large block orders. With regard to best execution, information leakage is an issue that is very costly to institutional investors and any 'minimum condition' that tries to

⁶² Connor Clark Letter, p. 2.

⁶³ The Equity Division of TD Securities, "High Frequency Trading Strikes a Chord with Politicians, Regulators and Market Participants", *S&P/TSX Bulletin*, p. 8.

⁶⁴ ASIC Consultation Paper 86 – Competition for market services, trading in listed securities and related data, http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/CP-86.

Competition for market services%20CP.pdf/\$file/CP-86-Competition for market services%20CP.pdf (accessed

force market participants to reveal their hand pre-trade goes clearly against best execution . . ." 65

The institutional trading community in Australia noted further:

"The implicit costs of trading (sometimes referred to as 'market impact costs') are the costs of exposing a large order to a market that does not have sufficient liquidity to execute that order. Competition will give rise to alternative execution venues. Some of those venues will operate in a manner that protects the confidentiality of customer orders, resulting in significant transaction cost savings for Australia's institutional investors and the millions of beneficiaries of the accounts that we manage.

Today, we rarely expose our full block orders to the public market and in many cases we do not show our full orders to our executing brokers. This is because of the potential market impact costs associated with information leakage from doing so. Alternative trading venues will provide new methods for our orders to interact, resulting in increased market liquidity. . . We do not believe that there is any need for pre-trade transparency for block trades as this would negate the primary benefit of a block trading system."⁶⁶

ASIC has recognized the views of Australia's institutional trading community on this issue. In a recently issued consultation paper on Australian equity market structure, ASIC wrote:

"There are some circumstances where pre-trade transparency can adversely impact a market and the investor in terms of price volatility and higher execution costs. For example, a large order can result in significant price movements, where other traders can act on the information before it is filled. In this context, having no pre-trade transparency ('dark liquidity') reduces the possibility of leakage and therefore lowers the costs of trading for these investors."

⁶⁵ Letter dated August 17, 2007 from representatives of Australia's institutional trading community to ASIC re: Consultation Paper 86 – Competition for market services, trading in listed securities and related data, http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/Consultation paper 86 submission institutionalinvestors.pdf (accessed February 2, 2011), p. 3 ("Institutional Investors Letter").

⁶⁶Institutional Investors Letter, p. 3.

⁶⁷"ASIC Consultation Paper 145 – Australian equity market structure: Proposals," November 2010, http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/cp-145.pdf/\$file/cp-145.pdf (accessed February 2, 2011), p. 97.

IOSCO

In October 2010 the Technical Committee of the International Organization of Securities Commissions (IOSCO) published a Consultation Report on "Issues Raised by Dark Liquidity". ⁶⁸ In various sections of the Consultation Paper, IOSCO recognizes the value of dark pools for institutions seeking to execute block orders with reduced market impact.

IOSCO first explains that dark pools have arisen to facilitate "more effective" execution of institutional orders with "minimal market impact":

"One such innovation is the expanded use of dark liquidity and the development of so-called *dark-pools*. Traders have always sought ways to preserve anonymity and execute orders with minimal market impact. Dark liquidity has long existed, for example, in the form of orders being held *upstairs* [at] trading desks and liquidity offered by firms that internalize their order flow. In recent years, the handling of dark liquidity has been made more efficient due to the use of new technology and trading models. This has resulted in, among other trends, significant growth in the number of dark pools that do not display any quotations." ⁶⁹

IOSCO specifically enumerates some of the reasons why traders may use dark pools, including:

- to avoid information leakage;
- to minimize market impact costs;
- to facilitate the execution of large blocks which may be difficult to achieve on transparent markets due to a lack of depth in the orderbook;
- to ensure better control of an order;
- to protect proprietary trading information;
- to avoid algorithms or programs that seek to identify or sniff out dark orders used in transparent markets;
- to take advantage of the possibility of price improvement; and
- to minimize transaction costs."⁷⁰

IOSCO further points out:

"[R]egulators must also keep in mind the trading interests of professional (i.e. non-retail) investors, who are primarily concerned about the costs of pre-trade

⁶⁸ Technical Committee of the International Organization of Securities Commissions, Issues Raised by Dark Liquidity, Consultation Report, CR05/10, October 2010,

http://hb.betterregulation.com/external/Issues%20Raised%20by%20Dark%20Liquidity%20%E2%80%93%20Consultation%20Report.pdf (accessed February 2, 2011) ("IOSCO Report").

⁶⁹IOSCO Report, p. 4.

⁷⁰IOSCO Report, p. 10.

transparency as they typically trade in very large sizes. It is these trading interests of professional investors that are often cited as one of the major reasons for the current interest in dark pools and dark orders."⁷¹

In light of IOSCO's recognition of the value provided by certain trading venues in facilitating the execution of large block orders, IOSCO provides the following guidance in the Consultation Report:

"The Technical Committee recognizes that different market segments have different trading needs depending on the type of order (e.g. large orders may incur market impact costs if subject to full pre-trade transparency obligations). The Technical Committee acknowledges these needs, and therefore suggests that it may be appropriate to have different levels of pre-trade transparency apply to different market structures or different order types.

Regulators may decide not to require pre-trade transparency for certain types of trading venues (e.g. call markets, reference-pricing venues or internal crossing systems/processes) or certain types of orders (e.g. large orders of institutional investors that do not wish such orders to be displayed)."⁷²

⁷¹IOSCO Report, p. 15.

⁷² IOSCO Report, p. 26.



IOSCO

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Reference Public Comment on Issues Raised by Dark Liquidity

Date 11 February 2011

Dear Mr. Bijkerk,

Optiver would like to thank you for the opportunity to provide you with our views on the consultation report "Issues raised by Dark Liquidity". Optiver fully supports regulatory developments which enhance market integrity. We would like to compliment IOSCO for taking the initiative and addressing the issues of dark liquidity in such timely and open manner.

Response to the Consultation Report

Our response is set out as follows. To facilitate IOSCO's assessment of our comments we firstly provide some corporate information to introduce Optiver. This is followed by some background on dark pools which we have found relevant and pertinent to our business. We have structured our specific responses to the paper according to different chapters in the consultation paper. Our detailed comments are provided separately below on Chapters 2, 4 and 5 respectively. We provide a short conclusion and our summary recommendations for IOSCO's principles regarding dark liquidity.

In case you might have any further questions or you would like to receive additional explanations following our response, please do not hesitate to contact Willem Sprenkeler at +31 20 708 74 93.

Optiver

Optiver is a global electronic market maker, providing liquidity in markets in Europe, the U.S. and the Asia Pacific region. Optiver's headquarter is located in Amsterdam, with additional offices in Chicago, Sydney, Hong Kong and Taipei. By posting two sided, continuous markets and taking advantage of relative pricing differences between related securities, we narrow the spread, which benefits pension funds, institutions, retail investors and all other market participants. By doing so Optiver adds value for the investing public. We concentrate on understanding and simplifying the relationships between financial products, then making the most competitive markets in them. Our trading strategies utilise real time information, advanced technology, transparent risk management systems and continuous innovation. Optiver is a strong supporter of open and transparent markets, with a level playing field for all.



Background

The significant growth in the use of dark pools over the last years has led to situation where more and more transactions do not any longer take place on lit trading venues. This absence of transparency in combination with fragmentation of liquidity are seriously threatening efficient price discovery on these markets. We would like to refer to a recent article in The Financial Times, which showed that the volume of trading (in e.g. FTSE 100 stocks) on venues that do not offer any pre-trade transparency is now around the same size as trading on lit venues. This compares to where it was around 25% dark vs. 75% lit a few years ago. And another report from the CFA Institute on financial markets in five different European countries, shows that dark trading (representing all trades in which both sides of an order are not pre-trade transparent) constitute a significant proportion of European equity trading, averaging 46.4% over the period from January 2008 to October 2010.²

Optiver believes that the market impact of this trend towards more and more 'dark trading' needs to be more fully analysed and specifically regulated otherwise confidence in the public price formation process might be lost with damaging effects on the overall market quality.

Dark pools are both broad and complex in characteristic and operation and raise difficult issues to address. There are certain aspects of dark liquidity which we believe require more urgent focus because market integrity consequences are more critical. We believe the proposed IOSCO principles do not go far enough to address such. Other aspects of dark liquidity are not so severe however still require more precise guidance because of their complexity. We discuss these matters in our response below.

Chapter 2 - Characteristics of dark pools and dark orders

Part C - How Dark Pools Operate

In Part C of the consultation paper IOSCO provides an overview of the different potential characteristics of dark pools. Optiver believes this description to be correct, but we also believe the paper lacks a good description of the different *types of dark pools* that are commonly operated in the financial market. Dark liquidity cannot be considered generically. There are in fact different degrees of dark liquidity. We believe a good taxonomy of the different types of dark pools was provided by Mittal.³ He identified five different types of dark pools, that all have certain incentives for operating such a pool. To focus the discussion we highlight them below:

1) Public Crossing Networks

This kind is the most traditional among the dark pools and mostly founded by agency-only brokerage firms.⁴ The main purpose of setting up these dark pools was generating commission. One of the most important elements of public crossing network is the absence of proprietary flow from the operator. These networks also come under the category of "agency pools".

¹ "Growth in off-exchange trade stokes pricing fears", The Financial Times, 26 January 2011.

² "The Structure, Regulation and Transparency of European Equity Markets under MiFID", CFA Institute, January 2011, p.34-44.

³ Mittal, H., "Are you playing in a toxic dark pool? A guide to preventing information leakage", Journal of Trading, volume 3, 2008, pp. 20–33.

⁴ Well know public crossing networks include ITGs Posit, Instinet CBX, Liquidnet, NYX Millennium and Pipeline.



2) Internalization Pools

This type of pool started to appear more recently and is mainly intended to internalize the operator's trade flow. Internalization pools differ from public crossing networks in that they can contain the operator's proprietary flow. Incentives to operate this type of pools are, for example: cost savings, generating commission and alpha generation. Other incentives might be commission generation and the ability to market the firms' brokerage services more easily to the buy side. The most important element in creating this type of pools is probably the barriers to entry it gives other sell side firms. The operator can basically restrict access whenever it likes to whomever it likes.

Recently these dark pools allow access to external parties to act as liquidity provider or taker. Having these external parties integrated differently into the dark pool than the traditional customers causes the risk of information asymmetry within these pools (compared to the open market). In general there are huge potential profits to be made from the price asymmetry if the order is shared with the own proprietary desk. On top of this there is also a lot of pressure to build size in the order book in order to be competitive with other broker-dealers.

3) PING Destinations

These are a type of dark pools that only accept IOC (immediate or cancel) orders. Their customer flow only interacts with the operator's own flow. These types of dark pools are mainly operated by big hedge funds or electronic market makers. Quantitative models running in black boxes decide whether or not the platform should accept the IOC order or possibly re-route it to another platform. Their major direct customers are sell-side firms using dark pool aggregators or smart routers to "ping" them. The economic incentives for these platforms are cost saving, spread making or alpha generation (having the flow interacting with their proprietary flow). Another distinctive element of these types of platforms is the ability to discriminate between customers as to who gets filled. This discrimination is generally based upon nature of the flow, pricing, speed and so on.

4) Exchange based dark pools

There are two type of pools in this category that are very similar in nature: (1) dark pools that are actually registered ATS's by exchanges and (2) pools of liquidity created as a result of hidden order types operated by Electronic Crossing Networks (ECN) and exchanges. The difference between the two lies in the pricing, whereas the registered ATS dark pools are similar to the traditional dark pools, i.e. prices on a per share basis, while the pricing of hidden order type pools is based upon the supplier-taker model. The economic incentive for this kind of pools is to attract more liquidity to the exchange or ECN.

5) Consortium Based Pools

These pools are operated by numerous partnering brokers. They tend to function as a hybrid between public crossing networks and internalization pools. They are mainly used as an alternative for the own dark pool and used if this pool is not able to execute the order or the residual of that order.⁸

Well known internalization pools include, Credit Suisse Crossfinder, Citibank Citi Match, Fidelity Cross Stream, Goldman Sachs Sigma X, Merrill Lynch MLXN, Morgan Stanley MS Pool and UBS PIN

⁶ Examples are Getco Execution Services and Citadel

⁷ Examples of exchange based dark pools are ARCA, BATS, ISE Midpoint Match+, Nasdag Cross, NYSE Matchpoint.

⁸ Examples are Level and Bids.



Part B - Purpose of Dark Pools

In Part B of its paper, IOSCO lists a number of industry based reasons supporting dark pools. We believe many of these reasons are flawed and contradictory. Given the way these different dark pools operate as described above, it is interesting to have a closer look at some of the *reasons for the use* (as stated on p.10-11 of IOSCO's consultation paper) compared to what may be considered as *incentives for the operation* of dark pools:

• To avoid information leakage (reason for use);

We believe it is a big misconception that there is no information leakage if a dark pool is used for a large transaction. There are several ways information of available liquidity is still leaked when a dark pool is used:

- Printing of partially executed trades;
- o A counterparty to a trade may assume there is more liquidity available;
- Some dark pools even advertise liquidity, that is, flash orders (Indications of Interest or IOI's);
- Fishing in dark pools by other market participants to find liquidity.

So instead of avoiding information leakage, what really happens is that information leakage is only reduced, and made available to a selective group of market participants, thereby effectively creating a two-tiered market between informed and non-informed investors. This is highlighted by the following example:

Assume in a dark pool that an order is entered to buy a very large volume of stocks as a pegged midpoint order. Assume an information leak exists in the dark pool according to any of the above reasons. This leads to a privileged information position being held. This is exploited by first execution at any offer price on the lit market ahead of the dark pegged order. These stocks can then be onsold to the dark order at a higher price.

To minimise market impact costs (reason for use)

A healthy market is supposed to reflect all known information about a stock, including supply and demand. The fact that an investor is buying or selling a large amount of shares obviously impacts supply and demand and should trigger a rise in the stock price.

A popular misconception in this respect is that a passive order, such as a midpoint order does not have market impact because no spread will be paid. This is a misconception because a midpoint order will be more likely filled in case of selling pressure (and as a result downward pressure on the price) rather than buying pressure (assuming the order is to buy). In case of a pegged midpoint order (which will bid mid price until filled) this dynamic will have as a consequence that the midpoint price at which the order will be filled will on average be at a higher price than prevailed at the time the order was submitted, the difference being the market impact of the order. This will be the case even absent of information leakage. Another way to look at it is that absent of the buy order the equilibrium price would have been lower.

• Execution of large blocks where there is limited depth in the lit order books (reason for use)
This is a rather new argument that has been mainly voiced during the last couple of years. It seems
to stem from the misconception that liquidity on the lit markets has reduced at the top of the order
book, due to fragmentation and reduced average order size (for which high frequency traders are
sometimes blamed). Optiver believes this argument does not hold. Liquidity at the best bid-offer
may be lower than some years ago, but this comparison is not correct unless one takes into
account the reduced tick sizes and looks at the liquidity within the 'old' spread and across markets.
Then you will find that liquidity in the consolidated order book has improved significantly. The only

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⁹ Due to the reduction in tick sizes spreads, a two-tick spread (for example) is now significantly smaller than it was when tick sizes were much larger. E.g. if the tick size in an underlying used to be 5 cents and is now 0.5 cent than one



difference is that investors may need to use a smart order router to have their order split in several smaller sub-orders and executed at exactly the same moment across different markets.

• To avoid algorithms or programs that seek to identify or sniff out dark orders used in transparent markets (reason for use)

Optiver believes this would be a valid argument if orders that can be sent to dark pools would be subject to minimum order size thresholds. Dark pools were historically intended to facilitate large block orders to reduce the market impact of such orders. The problem with most dark pools however, is that they are often used to execute small orders (even from retail investors) as well, thereby giving market participants the possibility to use such small orders to search for liquidity in dark pools.

This means that large orders in most dark pools have a lot of the characteristics of so called iceberg orders, where some market participants are using small orders to find out if there is more hidden liquidity behind the 'tip of the iceberg'. Whilst it is true that such iceberg orders are also allowed on several transparent public markets, there is a big difference in that on those exchanges all market participants have the same information (creating a level playing field) leading to a better execution for the end investor by taking away the opportunity to 'scalp' the order in the public market.

Cost savings – transaction costs (reason for use)

Many dark pools were set up with the goal to circumvent exchange fees, clearing fees etc with claim to reduce costs for the end investor. The fact however is that operators of dark pools these days usually charge fees which are higher to the fees that an investor pays for having his liquidity executed on a public exchange.

Cost savings – transaction costs (incentive to operate)

For internalisers, savings on external transaction costs are outweighed by trading profits. For agency dark pools, they have a fee generation motive similar to operators of exchanges.

• Generating trading revenue (incentive to operate)

This exists where customer flow interacts with proprietary trading flow from the trading desks of the operator of the dark pool. Effectively it means that the operator of a dark pool can choose which part of the available liquidity in the dark pool he can trade against and which parts he lets interact with other orders (or send to other venues), depending on whether he can pocket an easy profit. In practice this can mean that the operator of a dark pool uses his proprietary order flow to 'scalp' the customer flow in the dark pool by capitalizing on the spread between the bid and the offer (and where the reverse trade can actually take place on dark pool as well as on any lit markets). This is typical internalization and creates possibly a conflict of interest to clients.

Another risk that this practice may bring to the markets became clear on May 6th of 2010 (the "Flash Crash"). Dark pools have no *obligation* to trade against their customer orders and can decide to 'dump' their order directly into the market without warning or process. In its report on the Flash Crash the SEC showed that these types of platforms aggravated the downturn on the public markets when they only traded against the buy orders and dumped all the sell orders on the public market. ¹⁰, ¹¹

can argue that liquidity on the bid and offer in a 1 cent wide market is not as liquid as it used to be in the ten cent market, but if you take all the liquidity into account and compare the old ten cent spread with the current ten cent spread you will see total liquidity has actually improved.

¹⁰ http://www.sec.gov/news/studies/2010/marketevents-report.pdf, p.61.

¹¹ The SEC is now considering to impose a 'at or better' pricing, which would force dark pools to justify their internalisation based on market performance.



Chapter 4 - Regulatory Concerns

In its consultation paper IOSCO identifies three different issues surrounding the use of dark pools and dark orders in transparent markets. These are:

- The impact on the price discovery process where there is a substantial number of dark orders and/or orders submitted to dark pools which may or may not be published;
- The impact of potential fragmentation on information and liquidity searches:
- The impact on market integrity due to possible differences in access to markets and information.

Optiver fully agrees with IOSCO on these issues and believes these issues lead to serious concerns with respect to effect of dark orders and dark pools on the overall market structure. Below we would like to provide some comments on each individual 'issue'. Additionally Optiver believes IOSCO has overlooked the critical issue of The impact of dark liquidity on market stability and systemic risk. We discuss these different issues below.

The impact on the price discovery process where there is a substantial number of dark orders and/or orders submitted to dark pools which may or may not be published

In its consultation paper IOSCO rightfully states that there is the potential that the development of dark pools and use of dark orders could inhibit price discovery if orders that otherwise might have been publicly displayed become dark. Publicly available information on bids and offers enables investors to identify trading opportunities and reduce the costs associated with finding liquidity. Transparency also contributes to investor confidence, therefore encouraging higher levels of participation in the market. This, in return, increases liquidity and reduces market-related trading costs.12

In that respect we would like to refer to the report published by the CFA Institute, in which they show that high transparency usually correlates with lower bid-offers spreads. 13 Furthermore they note that dark trading (representing all trades in which both sides of an order are not pre-trade transparent) constitutes a significant proportion of European equity trading, averaging 46.4% over the period from January 2008 to October 2010.

Optiver would also like to bring to IOSCO's attention a scientific study done on trading on the ASX in March 2000. In this study Cao, Hansch and Wang show that the display of the best bid and ask prices accounts for about 55% of the price formation. Another 23% of the price formation is accounted for by the depth of the order book (the orders between the second and tenth best prices). The balance of the price formation comes from the post-trade display of trade prices. 14

An often overlooked aspect of dark liquidity is that dark liquidity not just leads to a worsening of the quality of the overall market (by widening spreads and hampering efficient price discovery), but that this phenomenon leads itself to even more demand for dark liquidity. When spreads on the public markets widen as a result of an increase in dark trading, these lit markets become less attractive, creating an incentive to trade even more in the dark. Dark pools using the price of a public market

2010, p.71.

¹² The Australian Securities and Investment Commission, "Australian Equity Market Structure", Report 215, November

¹³ "The Structure, Regulation and Transparency of European Equity Markets under MiFID", CFA Institute, January 2011, p.34-44.

¹⁴ C. Cao, O. Hansch & X. Wang, "The information content of the open-limit order book", Journal of Futures Markets, Vol. 29(1), pp.16-41.



as a reference price are effectively free riding on the public price formation, but have a strong interest in a widening of these public spreads at the same time.

In its consultation paper IOSCO states that price discovery could be inhibited "if orders that otherwise might have been publicly displayed become dark". This is exactly what has happened in the last years. Dark pools were once intended to facilitate the execution of large orders, but are more and more used to execute small orders as well – and even retail flow, often only to benefit the dark pool instead of the investor.¹⁵

IOSCO concludes the paragraph on price discovery with the statement that post-trade transparency is also an important element of the price discovery process. Optiver believes that this is an often neglected element in the debate on dark liquidity. We believe IOSCO's statement to be fully correct, but are often shocked by statements from operators of dark pools that information on transactions is of little value to market participants if they cannot access the liquidity. Disclosure of volumes and price information about completed trades contributes to price formation. This is why we would support a requirement on all dark pools to have post-trade transparency requirements similar to those of exchanges. ¹⁶

2 The impact of potential fragmentation on information and liquidity searches

Here IOSCO mentions the risks of potential fragmentation of information and liquidity when there are many different dark pools in operation. And IOSCO is correct when it states that there are other causes of fragmentation, often unrelated to dark liquidity. Optiver believes however that especially in fragmented markets pre-trade transparency is of crucial importance to the quality of the market. As the ASIC recently correctly stated:

"In markets with multiple execution venues, transparency is arguably even more important than in markets with a single execution venue. Where liquidity is fragmented across multiple venues, transparency is essential to ensure that investors are able to obtain a consolidated view of the multiple sources of liquidity. This allows investors to more efficiently search for and access liquidity."

Furthermore, as we have seen in the description of the different types of dark pools above, a lot of dark pools allow for internalisation of order flow. In that respect we would like to refer to a recent study on internalisation and dark liquidity in the context of a more fragmented market done by Weaver. In that research Weaver argues that internalisation has a significant adverse effect on price formation in markets that have a high level of fragmentation. It leads to a widening of spreads and reduction in the depth of the order book.¹⁸

3 The impact on market integrity due to possible differences in access to markets and information

Optiver believes that dark pools effectively create a two-tier market, as these dark pools accumulate both buy and sell orders that are not transparent to the general investing public, and

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¹⁵ To give an example - a typical retail investor wanting to buy share X and willing to pay the public offer of 100, may end up being executed in the brokers dark pool for 99.9999. For retail order flow 'price improvement' is almost always de minimis in nature and only serves to confuse investors.

¹⁶ Next to contributing to price formation, post-trade transparency is also important to enable investors to assess execution quality and to perform transaction costs analyses.

¹⁷ The Australian Securities and Investment Commission, "Australian Equity Market Structure", Report 215, November 2010, p.71.

¹⁸ D. Weaver, "Off-exchange reporting and market quality in a fragmented market structure", Comment on Concept Release Equity market structure (Release No. 34-61358), 16 April 2010, www.sec.gov/comments/s7-02-10/s70210-127.pdf.



which could affect the a stock's equilibrium. Both pre- and post-trade transparency are central to the efficiency *and* the fairness of the market.

A two-tiered market also results from the use of indications-of-interest (IOI's) which some dark pools send to the members of the dark pool as a means of attracting trading interest. This leads to a situation where only a selected group of market participants receives important information on liquidity available in the markets. We believe these IOI's are in fact almost similar to orders and should therefore be required to be made public to contribute to overall price discovery.

Furthermore IOSCO rightfully states that concerns arise if certain participants are unfairly denied access to a market. It's a fact however, that most dark pools are very selective (and restrictive) in whom they give access. For example firms engaging in high frequency trading are often denied access to dark pools, on the grounds that these dark pools do not want their clients' orders to be identified or *sniffed* out by firms that have no sincere interest in the available liquidity. Optiver believes however that other measures, such as for example requiring a certain minimum, firm order size for any order to enter the order book of a dark pool would be much fairer measure to reduce this possible risk.

Another important element to take into consideration is the fact that a lot of dark pools are effectively internalising client order flow. Brokers that operate a dark pool have a discretionary power to decide which order flow they want to trade against themselves. Naturally these brokers tend to prefer trading against the 'uninformed' order flow. This can lead to a situation where there is a relative increase in 'informed' order flow being rerouted to the public markets, leading of course to a widening of the spreads because market participants will be less eager to trade against this flow. ¹⁹ And to make things worse, this triggers additional demand for trading in dark pools.

4. The impact of dark liquidity on market stability and systemic risk

Another risk emerging from the use of dark pools that is not always acknowledged is the systemic risk that these platforms may bring. Trades done on exchanges are usually done via a central counterparty (CCP), who becomes the buyer to the seller and the seller to the buyer. The use of CCP's leads to dramatic reduction of the systemic risks associated with trading. Dark pools typically lack such a central counterparty. This means that the default of a large participant of a dark pool could have severe consequences for market stability.

Chapter 5 - Draft Principles

Principle 1 - The price and

Principle 1 – The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

At a minimum we agree to the above for agency pools but we do not believe that internalisers could meet the criteria in the first instance.

Principle 2 – Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and/or the fact that a trade resulted from a dark order.

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¹⁹ The relation between internalisation of uninformed order flow and widening of the spreads on public markets has been described by D. Easly, N.M. Keifer & M. O'Hara, in "Cream-skimming or profit sharing? The role of purchased order flow", Journal of Finance, Vol. 51, 1996, pp.811-833.



We believe that post trade transparency should be to the information level of public exchanges and there should not be delayed transmission. We accept that there can be waivers for pre trade transparency but there should be no additional post trade transparency waivers.

Principle 3 - In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

We firstly point out that dark trading should not be "generally" permitted. We believe IOSCO needs to make this point in its principles. We support dark liquidity which is "specifically" and "conditionally" permitted, however we do not support it where it is "generally" permitted.

Principle 4 – Regulators should have a reporting regime and/or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

We believe that this principle should be stronger. Regulators should have live access to the full order book with full disclosure on par with exchanges.

Principle 5 – Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

We agree with this principle with the qualification that the principle should not be considered to legitimise unfair practices or in itself be seen as compliance with Best Execution rules.

Principle 6 – Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

Agree. This should go so far as to mention consideration of key operating parameters such as scale and size definitions e.g. orders, block sizes. This should also consider regular review of dark pool waiver conditions.

Conclusion

Optiver fully supports IOSCO's goal to formulate some high level principles with respect to the functioning of dark pools and the supervision of these trading venues. We think the 6 principles in IOSCO's consultation paper are an important step in the right direction, but we are afraid they might not be focussed enough to limit the negative effects many dark pools have on the overall market quality. We would agree with the 6 principles in conjunction with our comments provided. The following important summary recommendations are given for dark pools:

- There should be non-discriminatory access for all interested parties;
- Trading should me made subject to a certain (substantial) minimum trade/quote sizes;
- A level playing field between dark pools and other trading venues with respect to organisational requirements, market supervision, transparency of rules etc.;
- Post-trade transparency should be provided for as quickly as possible;
- The dark pool should be dark for everyone.

We believe that all dark pools should fulfil the above criteria. If dark pools cannot fulfil them then they should not be permitted. Internalisers by their very nature will not necessarily meet all of these criteria.



Most often these dark pools weaken the public markets by taking away order flow while free riding on the public price formation. A number of studies on internalisation on the US markets have shown that internalisation at best is neutral and at worst harmful to market quality.²⁰

²⁰ See for example: B. Battalio, J. Greene & R. Jennings, "Order flow distribution, bid—ask spreads and liquidity costs: Merrill Lynch's decision to cease routinely routing orders to regional stock exchanges", Journal of Financial Intermediation, vol. 7, 1998, 338–58; H.K. Chung, C. Chuwonganant & D.T. McCormick, "Order preferencing and market quality on Nasdaq before and after decimalization", Journal of Financial Economics, vol. 71, 2004, pp. 581–612.





February 1, 2011

Mr. Werner Bijkerk Senior Policy Advisor International Organization of Securities Commissions (IOSCO) Calle Oquendo 12 28006 Madrid Spain

Re: <u>Public Comment on Issues Raised by Dark Liquidity</u>

Dear Mr. Bijkerk:

The Securities Industry and Financial Markets Association ("SIFMA")¹ and the Association for Financial Markets in Europe ("AFME")² welcome the opportunity to comment on the Technical Committee ("Committee") of the International Organization of Securities Commissions ("IOSCO") Consultation Report regarding Issues Raised by Dark Liquidity ("Report").³ We appreciate the timeliness of the Committee's review of the various regulatory issues raised by dark liquidity, and we are pleased to comment on the five Topics set forth in the Report.

As a general matter, we believe that dark liquidity, including internalization practices of broker-dealers, provides genuine benefits to the markets and their participants (including intermediaries and professional and retail investors) without detracting from the overall vibrancy of displayed markets. For example, as the Committee is aware, dark liquidity often is used by market participants seeking to avoid adverse market impact when executing their trades. In addition, internalized executions by broker-dealers, in particular, provide investors – often retail investors – with speedy executions and, frequently, price improvement, mainly because broker-dealers retain control over the order execution process.

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¹ The Securities Industry and Financial Markets Association ("SIFMA") brings together the shared interests of hundreds of securities firms, banks and asset managers. SIFMA's mission is to support a strong financial industry, investor opportunity, capital formation, job creation and economic growth, while building trust and confidence in the financial markets. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association ("GFMA"). For more information, visit www.sifma.org.

² The Association for Financial Markets in Europe ("AFME") promotes fair, orderly, and efficient European wholesale capital markets and provides leadership in advancing the interests of all market participants. AFME represents a broad array of European and global participants in the wholesale financial markets, and its 197 members comprise all pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants. AFME provides members with an effective and influential voice through which to communicate the industry standpoint on issues affecting the international, European, and UK capital markets. AFME is the European regional member of the Global Financial Markets Association (GFMA). For more information, visit the AFME website, www.AFME.eu.

³ Issues Raised by Dark Liquidity, Consultation Report, Technical Committee of the IOSCO (Oct. 2010) ("Report").

Moreover, we believe that the availability of dark liquidity has not impaired price discovery or execution quality in the U.S. or in Europe. To the contrary, displayed markets remain healthy. Indeed, the most recent studies we have seen regarding the U.S. markets demonstrate that the availability of dark liquidity venues has not, in fact, adversely impacted the displayed markets. For example, a very recent working paper on the impact of dark pools on U.S. market quality concludes that "a higher amount of dark pool activity is associated with lower quoted and effective spreads, lower price impacts, and lower short-term volatility. In other words, more dark pool activity is generally associated with higher market quality."

The conclusions of this research are borne out by our experience with the U.S. and European markets. In the U.S., we note, for instance, the prevalence of very narrow spreads in national market stocks, indicating that effective and efficient price discovery is occurring in the public markets. In addition, by protecting the top of book of U.S. trading centers, the Securities and Exchange Commission's ("SEC") Order Protection Rule (Regulation NMS Rule 611), which prohibits trade-throughs, is an effective supplement to the duty of best execution in policing execution quality. Studies also indicate there have been improvements in depth of book display beyond the national best bid or offer ("NBBO"). These trends have occurred concurrent with the growth of alternative trading systems – which have offered significant opportunities for price improvement to their end users, including firms representing retail investors – as a percentage of all dark liquidity venues.

In light of the evidence to date, we believe that market participants should have the ability to utilize dark liquidity to facilitate their trading and that such dark liquidity would not adversely impact the U.S. and European markets. We acknowledge, however, that market structures and practices will continue to develop and may vary across jurisdictions. Therefore, we believe that it is critical that regulators, academics, market participants and other interested parties continue to perform empirical analyses of the effect of dark liquidity on transparent markets before making market structure changes that impede or limit the use of dark liquidity by broker-dealers and other market participants. Such analysis would allow lawmakers and

⁴ Sabrina Buti, Barbara Rindi and Ingrid M. Werner, Diving into Dark Pools, Fisher College of Business Working Paper (available at http://fisher.osu.edu/fin/faculty/werner/working_papers.htm).

⁵ See O'Hara, Maureen and Mao Ye, *Is Market Fragmentation Harming Market Quality?* (Mar. 2009), 19, (available at http://ssm.com/abstract=1356839) ("In the post-Reg NMS world, effective spreads are extremely low, with average spreads in the 3-4 cent range. Turning to our specific hypothesis, the data show that effective spreads are lower in the fragmented sample on average by .29 cents with median spreads lower by .11 cents.").

⁶ We understand that the Committee's mandate "does not cover issues relating to how best execution is to be met in relation to dark liquidity." Report at 5. However, we believe it is important to recognize that best execution is a key factor in determining the appropriate regulatory response to the use of dark pools.

⁷ Angel, James J., Lawrence E. Harris, Chester S. Spatt, *The Economics of Trading in the 21st Century* (Feb. 23, 2010), 15 (available at http://www.knight.com/newsRoom/pdfs/EquityTradinginthe2lstCentury.pdf). *See also* Yossi Brandes and Ian Domowitz, Investment Technology Group, Inc., Alternative Trading Systems in Europe: Trading Performance by European Venues Post-MiFID (May 2010) (available at http://www.itg.com/news_events/papers/ITG-Paper-AlternativeTrading-051910F.pdf) (concluding that European dark pools add value to their users by lowering transaction costs and reducing slippage).

regulators to accurately calculate the level of riskless principal and principal trading that occurs in the over-the-counter markets, and to respond appropriately to that knowledge. The need for a clearer understanding of dark liquidity and other over-the-counter trading is particularly acute in Europe where there is a general perception that circa 40 percent of European equities trading is the result of bilateral trades with clients and broker-dealers which could be moved directly onto the lit markets. In reality, the "OTC trades" percentage includes a vast number of technical trades that are required to be reported but form no part of price formation (*e.g.*, "give-up/in" trades between executing broker and prime broker) or which do not represent liquidity available to other market participants (*e.g.*, "risk facilitation" trades for clients which will subsequently be unwound in the market). In a January 24, 2011 paper entitled "Breaking Down the UK Equity Market: Executable Liquidity, Dark Trading, High Frequency and Swaps," the TABB Group "...estimates that while OTC-reported turnover accounts for 45% of the market, less than a quarter of it is executable. The balance, says [TABB], is in fact comprised of reprints of already-traded turnover with 72% of executable liquidity being traded on the lit order book of an exchange or multilateral trading facility (MTF)."

Specific Topics

1. Topic 1: Transparency to Market Participants and Issuers

a. Pre-Trade Transparency

In Principle 1, the Committee states that "[t]he price and volume of firm bids and offers should generally be transparent." We believe that Principle 1's focus on the need for pre-trade transparency fails to appropriately recognize the value that dark liquidity provides to the markets. Dark liquidity plays an important role in the investment trading process, in ensuring market efficiency, and in price formation. As such, the use of dark liquidity, when properly regulated, will continue to be beneficial to investors of all types. Therefore, we urge the Committee to amend Principle 1 to specifically recognize the positive role that dark liquidity plays in the marketplace as well as the fact that different levels of pre-trade transparency may be appropriate for different market structures or order types.

The Principle's proposed general pre-trade transparency requirement reflects a concern that dark liquidity impairs price discovery and provides disincentives to publicly display

⁸ As the former Director of the SEC's Division of Trading and Markets, Erik Sirri, said,

[&]quot;... dark pools of liquidity have been around for a long, long time. The single largest dark pool in the world for many decades could be found on the trading floor of the New York Stock Exchange. The floor traders there manually represented a pool of undisplayed liquidity that could be accessed only by sending an order to the floor to probe buying and selling interest. ...Dark pools are solutions to a perennial trading dilemma for anyone that needs to trade in substantial size, particularly institutional investors. They provide a mechanism for such transactions to interact without displaying the full scale of their trading interest. Today, nearly every equity trading venue in the U.S. offers some sort of dark liquidity."

quotations. These concerns appear to be based on the assumption that the use of non-displayed liquidity diverts order flow away from the public quoting markets, thereby adversely affecting the execution quality for those market participants that display their orders in the public markets. Based on history and practice in the U.S. and Europe, we believe these fears are unfounded or, at least, should be tested empirically.

First of all, there is no economic incentive for all (or most) liquidity to go dark. Trading professionals, particularly those with large orders that are likely to have a significant impact on the market (*e.g.*, orders for money managers that oversee collective pools of assets contributed by individuals), always have a dual focus when seeking best execution of their orders: displaying a quote to achieve a more certain execution (with the risk of moving the market adversely) versus not displaying a quote in an attempt to reduce market impact and potentially obtain price and/or size improvement. This natural "give and take" between certainty of execution (and eliminating "opportunity cost risk") and managing market impact (with attempted price/size improvement) works to maintain equilibrium between non-displayed and displayed liquidity.

Indeed, such equilibrium generally has been maintained over the years, even as non-displayed liquidity has evolved from a manual process to more automated solutions. For example, since the early years of the New York Stock Exchange and other stock exchanges, there have been floor brokers who worked large orders discreetly in order to obtain the best possible price for investors. In the over-the-counter markets, traders held their trading interest on their desks and used the telephone to call trusted partners to inquire about possible matches. As markets have evolved, new ways of managing this trading process and the risks associated with displaying large trading interest have developed. The growth in the number of alternative trading systems, MTFs, and Broker Crossing Networks (BCNs), for example, can be viewed as a natural and necessary electronic evolution of an age-old process, rather than a new trading concept.

In addition, we note that dark orders and related trading activity are part of the price discovery process. Market participants that use dark orders constantly monitor and respond to displayed bids and offers as well as to last sale and volume traded information (which originates from both displayed and undisplayed order types and markets). Market participants using dark order types display orders when market conditions compel them to shift from passive to more aggressive interaction with the marketplace. For example, when the market price of a security changes or transaction volume is reported to the market (again, whether executed at a displayed market or dark pool), such activity can cause trading behavior to change from passive (*i.e.*, use of undisplayed or partially displayed orders) to active, where a trader will "take" or display liquidity.

In our view, markets and trading technologies naturally evolved considerably over time, becoming more sophisticated and complex; however, the markets have not been adversely impacted by the availability of dark liquidity. Therefore, we urge the Committee to continue to recognize the benefits of dark liquidity to investors. Nevertheless, we support periodic reviews of new trading developments to ascertain their effect on market efficiency and the price

discovery function and to determine whether new or different regulation is needed. As such, we support Principle 1's statement that regulators should consider the impact of new types of dark liquidity on price discovery, fragmentation, fairness and overall market quality.⁹

b. Post-Trade Transparency

With regard to Principle 2, we support the goal of providing post-trade transparency for trades executed in dark pools or as a result of dark orders entered into transparent markets. We also believe, however, that any such post-trade transparency requirements must be balanced against the interests of investors using dark liquidity to minimize market impact when effecting their transactions. In particular – and noting that current trade reporting requirements vary between jurisdictions (for example, Dark MTF trades are reported in real-time with a venue identifier in Europe), we are opposed to the extension of real-time trade reporting of the identity of dark pool operators, including ATSs and BCNs, on the basis that this would impose unnecessary risks to market participants seeking the best manner in which to execute their orders. Many large "parent" orders are, in fact, executed as a series of smaller "child" orders in today's markets. Thus, the extension of real-time trade reporting of dark pool operator identities will lead to information leakage that ultimately will harm the ability of users of dark pools to execute orders without market impact.¹⁰

Real-time reporting of the identity of a dark pool operator in trade reports raises more concerns than does identifying executing exchanges on trade reports. Most dark pool operators have a relatively small percentage of overall market share. Many dark pool operators also generally have fairly narrow business models, many with specific matching criteria and specific types of users, as opposed to the more broad business models used by exchanges. The combination of these factors means that sophisticated traders have a greater ability to ascertain information related to the activity in the dark pool – specifically, the kinds of working orders likely to be active in the dark pool at any given time – than they would for an exchange. Therefore, real-time identification of dark pool operators in trade reports would significantly enhance the ability of sophisticated traders to ascertain large orders within such systems, particularly orders in smaller dark pool operators. This information could then be used to trade in a manner to the ultimate detriment of the users of a dark pool. By contrast, the identification

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⁹ The Committee notes that "[r]egulators should consider whether it is appropriate to treat actionable indication of interest ("IOIs") as firm quotes." We note that the SEC has previously differentiated IOIs and orders by describing IOIs as interest to buy or sell a security where the price, side or number of shares is not always specified, unless the price or size is implied. In other words, an IOI is trading interest that cannot be executed without further interaction between the market participants. We support the continued reliance upon this previously articulated definition of an IOI. However, we urge regulators to clarify and then appropriately enforce the application of this definition to new types of trading interests as they appear. Similarly, we support the European Commission proposal in its MiFID Review Consultation Paper to treat actionable IOIs as orders.

¹⁰ For example, order anticipation strategies employed by proprietary trading firms attempt to ascertain the existence of a large buyer or seller in the market and to trade in the direction of that trading interest. Such strategies may include the use of sophisticated pattern recognition software to ascertain the existence of a large buyer or seller from publicly available information, or the use of orders to "ping" market centers to locate and trade in front of large buyers or sellers.

of exchanges in real-time trade reports is less problematic because the trades are not identified by individual broker-dealer, but instead are attributed to the exchange more generally. It is important to note that, in the U.S. and in Europe (and perhaps in other jurisdictions), the use of non-displaying trading systems is not limited to institutions or broker-dealers representing institutional orders. Rather, all types of order-sending firms within the broker-dealer community, including those handling retail orders, access such trading systems. As a result, the negative impact of providing real-time identifying information regarding dark pool operators will be felt across a broad spectrum of market participants, including retail investors.

Moreover, real-time disclosure of the identity of dark pool operators on trade reports is unnecessary because there are alternatives that would better achieve the transparency goals without inadvertently generating negative consequences for investors. Specifically, we believe that the timing of dark pool trade data disclosure should reflect the liquidity of the securities concerned. For example, we recommend end-of-week reporting of ATS trade data on a symbol-by-symbol basis for each ATS. If end-of-week reporting is deemed insufficient, end-of-day public reporting of the identity of dark pool operators executing trades in relatively liquid National Market System stocks and most European stocks should achieve the regulators' goals while sufficiently protecting dark pool users from adverse market impacts that would result from real-time disclosure of the identity of the dark pool operator in trade reports. For less liquid stocks (*e.g.*, Nasdaq Capital Market stocks), we believe that end-of-week public trade reporting would be necessary because end-of-day trade reporting in such names likely would result in the same information leakage concerns raised by real-time reporting of a dark pool operator's identity in trade reports.

We appreciate that regulators may need increased transparency of the identity of dark pool operators effecting trades to effectively surveil the markets. If the regulators believe that real-time reporting of the identity of dark pool operators executing trades is necessary for regulatory purposes, we would support disclosure of such information to regulators. Our primary concern with any proposal to identify dark pool operators on a real-time basis centers on the negative consequences that likely would attend such reporting to the public. We have no such concerns with respect to the availability of such reports to regulators for oversight purposes.

2. Topic 2: Priority of Transparent Orders

We agree with the general goal of Principle 3 – that is, ensuring that there are adequate transparent orders in the marketplace. However, we believe that such a goal must be appropriately balanced with the recognition of the value of dark liquidity. As such, we would oppose substantial limitations on the use of, or disincentives to use, dark liquidity for the reasons discussed above. While we thus accept that transparent orders should have priority over dark orders on the same order book, we believe that a cross-venue requirement for transparent orders to take priority over dark orders would curtail best execution and disadvantage investors. Instead, we believe the U.S. approach of relying on, among other things, the duty of best execution, the Order Protection Rule, and consolidated market data to incent transparent orders is the better practice. We, therefore, urge the Committee to incorporate into Principle 3 the need to

carefully evaluate the effect of any disincentives to use dark liquidity on the markets and their participants in light of the benefits of dark liquidity (as discussed above).

3. Topic 3: Reporting to Regulators

We support the objective articulated in Principle 4 that regulators should have access to sufficient information about trades executed in dark pools or via dark orders to effectively surveil the markets. As noted above, we would limit the <u>public</u> dissemination of pre-trade information and certain post-trade information related to such dark trading given the likely negative consequences of such information sharing. Reporting such information to the regulators, however, would not raise those same concerns. Therefore, we would support such trade reporting as may be necessary and appropriate for oversight purposes.

4. Topic 4: Information Available to Market Participants about Dark Pools and Dark Orders

We fully support the requirement set forth in Principle 5 for dark pools and transparent markets that offer dark orders to provide participants with sufficient information to understand the manner in which their orders are handled and executed. The benefits of dark trading rely on keeping trading interest confidential; however, this does not mean that participants should be kept in the dark as to the manner of trading itself. Therefore, as the Committee suggests, we would urge dark pools and transparent markets with dark orders to provide participants with detailed information on how trading occurs, to include explanations of priority, the order interaction between dark and transparent liquidity, any use of indications of interest, and who has access to trading information.

5. Topic 5: Regulation of the Development of Dark Pools and Dark Orders

As we note above, we believe that it is critical for regulators to keep abreast of new developments in the markets, and to respond to such developments as warranted. This objective applies as well to dark pools and dark orders. Therefore, we support Principle 6 as articulated by the Committee, and agree that regulators should monitor the development of dark pools and dark orders to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

* * * * *

We appreciate this opportunity to comment on the issues raised in the Report. If you have any comments or questions, please do not hesitate to contact the undersigned at christian.krohn@afme.eu or avlcek@sifma.org.

Sincerely,

/s/ Christian Krohn

Christian Krohn Managing Director AFME

/s/ Ann Vlcek

Ann Vlcek Managing Director SIFMA

cc: Mr. Carlo Comporti, Acting Secretary General European Securities and Markets Authority

Mr. Emil Paulis, Director Financial Services Policy and Financial Markets European Commission

Mary L. Schapiro, Chairman U.S. Securities and Exchange Commission

Luis A. Aguilar, Commissioner U.S. Securities and Exchange Commission

Kathleen L. Casey, Commissioner U.S. Securities and Exchange Commission

Troy A. Paredes, Commissioner U.S. Securities and Exchange Commission

Elisse B. Walter, Commissioner U.S. Securities and Exchange Commission

From: <u>Lavdas, George</u>
To: <u>Lavdas, George</u>

Subject: Tata Consultancy Comment Letter on Dark Pools Report

Date: Monday, January 31, 2011 10:57:55 AM

---- Message from Rajesh Saraf <rajesh.saraf@tcs.com> on Thu, 27 Jan 2011 19:02:39 +0100 ----

To: Consultation Reports < <u>creports@iosco.org</u>>

cc: "rajeshsaraf@yahoo.com" <rajeshsaraf@yahoo.com>

Subject: "Public Comment on Issues Raised by Dark Liquidity"

To, Mr. Werner Bijkerk Senior Policy Advisor, IOSCO Calle Oquendo 12 28006 Madrid, Spain

Dear Mr. Werner Bijkerk,

At the outset, I would like to congratulate the TCSC2 of IOSCO for publishing an interesting and informative report capturing various important dimensions of dark liquidity. The issues and concerns listed in the report can potentially have profound ramifications on the structure and operations of various markets across the globe, be it the developed or emerging markets.

Please find my comments/observations on the Consultation Report on 'Issues Raised by Dark Liquidity' October 2010 as below * -

1. Principles to address concerns on pre-trade transparency (Topic 1: Principle 1, page 25) -

Pre-trade transparency plays a major role in driving liquidity and efficiency in price discovery. Hence, as the share of dark liquidity today is significant and keeps growing, it is appropriate to expect that dark liquidity should play some role in price discovery.

The report provides good enables/ideas on how regulatory bodies of respective markets can bring in measures to enhance pre-trade transparency that are best suited for their respective market structures.

In addition, it may be worthwhile to examine if dark pools and dark orders can also contribute to the price discovery without disturbing the underlying characteristics and purpose for which they were introduced in the market.

The exchanges disseminate firm order book information on real time/near real time basis to the market such as price/volume information for the best 'n' orders in the book. Dark liquidity venues can also be asked to publish dark order book information that can provide a very high level indication of the dark order flow available in the market, such as -

1. Publishing an average (simple/VWAP) price or a corresponding price slab for all dark orders at a given point of time as a snapshot.

Example - Average price of all dark orders in the book at time 10:35:00:01 is 98.25 OR Price range of all dark orders in the book at time 10:35:00:01 is 98-100.

2. Slab based indication of aggregate volume depth available in dark order books at a given point of

time as a snapshot.

Example - Volume of all dark orders in the book at time 10:35:00:01 is in range of 5-10 million shares

2. Principles to address concerns on pre-trade transparency (Topic 1: Principle 1, page 26 para 4) -

The report states that regulators should continually monitor the use of dark pools and dark orders to check if there are potential risks to the price discovery.

It would be good if the final report specifies few specific enablers/ideas/thoughts on how to ascertain and quantify such potential risks through market monitoring.

3. Priority of transparent orders (Topic 2: Principle 3, page 27)

The report makes a valid point here that regulators should take steps to ensure that there is adequate transparency available in the marketplace rather than focusing on discouraging dark orders.

There are exchange venues which allow what can be called as 'limited nature dark orders (with regard to order volume)' and they are functioning well.

Example - Iceberg/DQ orders wherein entire order volume is not displayed at a time. To the extent of the volume that is visible, the exchange venues treat it like any other fully transparent order. However once the visible volume of the order is fully executed, such order is re-timestamped thereby loosing the priority.

4. Regulation of the development of dark pools and dark orders (Topic 5: Principle 6, page 29)

To ensure that dark pool trading venues do not adversely impact the market structure, the regulatory authorities need to take a holistic approach of regulation. The focus of regulations should not only be on improving transparency (pre/post trade) of liquidity venues but also on overarching regulatory framework for market participants to enter, participate and operate in dark pools.

Regulatory authorities could look at creating differential and tighter rules for participation in dark pools which may act as entry barriers such as higher capital adequacy norms, stricter due diligence for entry, deeper on-going compliance checks, costlier licenses/membership fees, etc.

5. Market participant/user perspective to dark liquidity

The report mentions that market participants are increasingly choosing dark liquidity venues over the traditional trading venues and hence there is growing need to address associated issues and regulatory concerns.

Here, in my view, there is a need to understand the root cause of this issue. In other words, it may be worthwhile to understand the reasons why market participants prefer dark liquidity venues over traditional trading venues like exchanges today. Some of these reasons are already listed on page 10 of the report.

However, TCSC2 may have received more insights on this aspect while surveying market participants as a part of this study. It may be useful if detailed market participant survey findings are also be published in the final report to highlight market participant perspective on dark liquidity vis-a-vis exchange venues.

These insights could act as a feedback for exchange venues and lead them to new ideas to further align and integrate dark liquidity trading models into their conventional fully transparent trading models. This, in long run, may also result in a shift of business back within the ambit of exchanges which

operate within the well established regulatory framework thereby mitigating the urgency to address the issues related to non-exchange dark liquidity venues, to an extent.

Best Regards,

Rajesh Saraf

Rajesh Saraf is a Senior Consultant in Financial Services Consulting group of Tata Consultancy Services Ltd. (TCS). The group provides range of consulting services spanning across business models, processes and business applications of the global capital market players. Rajesh has 17+ years of experience in securities markets trading, clearing and settlement.

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*The comments/observations made and views expressed by Rajesh in this note are his individual views based on his knowledge of the subject area and industry experience of being associated with APAC markets.

COULD YOU PLEASE CONFIRM THE RECEIPT OF THIS MAIL BY SENDING AN ACKNOWLEDGEMENT

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Public Comment on Issues Raised by Dark Liquidity

IOSCO Technical Committee Consultation Report on Dark Liquidity CR05/10 of October 2010

WFE response submitted to <u>darkliquidity@iosco.org</u>, under message subject line of "Public Comment on Issues Raised by Dark Liquidity," with text attached in Microsoft Word format.

Mr. Werner Bijkerk Senior Policy Advisor International Organization of Securities Commissions (IOSCO) Calle Oquendo 12 28006 Madrid

Paris, 11 February 2011

Dear Mr. Bijkerk,

The World Federation of Exchanges ("WFE")¹ welcomes IOSCO's Public Consultation on the Issues Raised by Dark Liquidity, and takes this opportunity to comment on the direction in which regulators may advance on several of the interconnected issues set forth in the Consultation Report.

Member exchanges may be answering IOSCO directly with comments, which should provide context and depth on the matter from the perspective of an individual regulated market operator. This federation letter should be read as a complementary group view.

Introduction

At every instant, a regulated marketplace is shared amongst actors who have greatly varying needs and expectations, and who come to trade on a fair venue. Given the different size, clout and information background of all these actors, domestic and foreign, there is a clear need for a regulatory framework to establish guidelines for access.

¹ WFE is a non-profit trade association of publicly regulated stock, futures and options exchanges operating worldwide. The Federation contributes to the development, support and promotion of organized and regulated securities and derivatives markets. The WFE is an affiliate member of IOSCO.

Exchanges have often provided trade order types that were "dark," in order to accommodate the concerns of clients who wished to trade anonymously. As the Report explains, the wish to trade anonymously stems from the concern an investor would have that the market would see and respond to a significant order size with adverse pricing. Trades amounting to several percent of a security's free-floating capital have long been problematic for institutional investors, who found themselves having to "work" an order laboriously through the displayed order book, hoping to get the job done without being noticed. Exchanges have had rules to facilitate block trading, often at a certain distance from the central market bid-ask price displayed at that moment, because liquidity limitations would not allow execution otherwise – but the rules were publicly known and fair to all who found themselves in that circumstance.

Information technology developments of the past several decades have enabled more extensive and subtle ways for the marketplace to offer and handle dark order types as the switch from floor to screen progressed for the central market.

Regulatory change has also had its role to play, notably in the establishment of various kinds of alternative trading venues since the late 1990s. With the institutionalization of the marketplace accentuated since the early 1990s, particularly in the North Atlantic markets, the demand for facilitating "large" trades only rose. The interaction of three forces — the institutionalization of these markets, IT possibilities, and now the choice of off-exchange alternative venues - led to requests by some clients to trade more extensively in dark venues. That demand was responded to in the form of numerous new platforms which seemed almost tailor-made for some institutions' needs with respect to execution of large orders in a dark environment.

Dark pools were the subject of review by exchange managers in the context of this Federation's work. Transparent venues are, after all, one of the signatures of a regulated exchange; members take the greatest of care to preserve them. Yet there were two other questions which had to be put into the new balance as of the mid-2000s: orders were allowed to go off-exchange in the new regulatory environment prevailing, mainly in the North Atlantic region, so some liquidity was leaving the central marketplace; and then there was direct institutional demand made to exchanges for "dark" liquidity.

Many exchanges responded by launching dark pools of their own, or purchasing start-ups judged to be promising for the trading volumes they were generating, but which were faltering commercially.³ The exchange advantage in the dark pool offer has always been that client positions are not dark for the market operator, and so these venues, too, have been subject to surveillance, position management, and offer audit trails in case of investigation. Those are significant protections for investors. In addition, there are suggestions that exchange-operated dark pools are able to tie liquidity back to the main lit market pool operated by the exchange.

² This may have been one of the rationales for dark pools. But as the Rosenblatt data cited in this letter show, the size of the transactions in dark pools, with only a couple of exceptions, are no larger than the transaction on exchanges. The larger purpose they have come to serve is internalization.

³ "Trading Talk," Rosenblatt Securities, 27 January 2011. According to company data, exchange-operated dark pools in the United States accounted for 3.43 % of US equity volumes, and other dark pools a further 13.27% of all volumes. Dark trading therefore represented 16.70% of all equity trades, underscoring the significant size to which this business has grown, with the exchange portion still relatively small.

Comments on Proposed IOSCO Principals

WFE would recommend that considerable care be taken in the final commentary supporting the Principles put forth, as at times the meaning behind them is not entirely clear. For example, the draft commentary infers that "internal crossing systems / processes" necessarily involve a "different market structure" such as to qualify them automatically for a pre-trade transparency exemption. Yet this might undermine the function of Principle 1, being an injunction to regulators to assess critically whether a particular system / process is, in fact, different to a relevant extent from other trading systems / market structures for the purposes of pre-trade transparency. When the buying and selling interests of these internalized orders are excluded from the price discovery process, that process remains incomplete.

Another example would be the assessment of the "impact" of not providing pre-trade transparency, which should explicitly refer to the market impact costs to the person executing the dark order. IOSCO and its member regulators should consider, too, the impact on other users of lit venues if the exception to pre-trade transparency is allowed, in other words, what would happen in the form of wider spreads or reduced liquidity and participant interest?

A last general qualification has to do with the problem of setting numerical limits, above which or below which certain kinds of transactions may or may not be allowed or exempted. The market often moves towards such numerical limits, reducing somewhat the usefulness. In the end, the IOSCO text might be improved by the addition of qualitative assessments on the part of the regulators and market participants. On this point, judgments will have to be made as to what is appropriate for dark trading segment by segment.

<u>Principle 1</u>: The price and volume of firm bids and offers should generally be transparent to the public. However, where regulators consider permitting different market structures or order types that do not provide pre-trade transparency, they should consider the impact of doing so on price discovery, fragmentation, fairness and overall market quality.

WFE agrees that the objective of regulators should be to encourage transparent price discovery. The waiver of pre-trade transparency on prices and volumes of orders should be given on an exceptional basis, only in the event that a significant adverse market impact could be expected. Further, WFE would suggest that IOSCO change the term from "firm bids and offers" to "actionable bids and offers," in order to cover actionable indications of interest.

<u>Principle 2</u>: Information regarding trades, including those executed in dark pools or as a result of dark orders entered in transparent markets, should be transparent to the public. With respect to the specific information that should be made transparent, regulators should consider both the positive and negative impact of identifying a dark venue and / or the fact that the trade resulted from a dark order.

WFE strongly supports the improvement in information about the execution of trades in dark pools. In addition to enhancing pre-trade transparency, more detailed post-trade information needs to be broadly disseminated.

<u>Principle 3</u>: In those jurisdictions where dark trading is generally permitted, regulators should take steps to support the use of transparent orders rather than dark orders executed on transparent markets or orders submitted into dark pools. Transparent orders should have priority over dark orders at the same price within a trading venue.

With one qualification, WFE supports the priority to be given to transparent orders over dark orders. This is a matter of practicality – this question must be looked at not only within the same trading venue but also across trade execution venues, taking into account the ways in which they interact. One way to do this is to prohibit the execution of a dark order at a given price until all transparent orders at that price have been filled. Regulators may wish to consider conducting a review of the inter-linkages between transparent and dark order books offered by single market operators.

<u>Principle 4</u>: Regulators should have a reporting regime and / or means of accessing information regarding orders and trade information in venues that offer trading in dark pools or dark orders.

WFE endorses this point without qualification; this is about assuring the integrity of the overall marketplace. For those marketplaces with fragmentation, additional information from the dark areas would enable regulators to have more complete information for surveillance purposes. Exchanges in these jurisdictions can only see what is going through their computer systems, though that does include their dark segments.

WFE distinguishes between a real-time reporting regime for transactions across all platforms, and regulators' having delayed or on-demand batch access to order flow information, which is a critical asset for trading venues. This can and should be obtained by the supervisory authorities, but perhaps on the basis of a careful compromise on the timing such that confidentiality at the pre-trade moment is maintained. It is understood that most of the data thus collected would remain confidential to the regulators.

<u>Principle 5</u>: Dark pools and transparent markets that offer dark orders should provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed.

It is a matter of principle that exchanges provide all participants with clear rules on order handling and execution, so that access patterns and priorities are well established and publicly known. WFE endorses this proposed IOSCO Principle with great vigor, because its implementation would create a sounder overall capital market.

<u>Principle 6</u>: Regulators should periodically monitor the development of dark pools and dark orders in their jurisdictions to seek to ensure that such developments do not adversely affect the efficiency of the price formation process on displayed markets, and take appropriate action as needed.

WFE supports the monitoring of dark pools and dark orders by capital markets overseers. The regulators should ensure that the market share of dark pools is not hindering or eroding the quality of price formation processes on transparent markets. WFE agrees that it is a standing responsibility of capital markets authorities to be responsive to evolving market structures.⁴

WFE would propose that IOSCO make the standard for dark trading one of "enhancing the quality of the price formation process," rather than "not hindering or eroding the quality of the price formation process on transparent markets." It should be clear that the dark environment should be used on a very exceptional basis only and not be the rule; and that the standard for granting the exception to using the lit market be made more demanding.

Conclusions

Fairness is an elusive objective, but exchanges are structured to provide neutral trading operations, independent of the interests of any one constituency; that neutrality is crucial for equality of access and treatment. IOSCO might wish to consider ways to assure that other execution venues offering dark execution are equally neutral. WFE would propose that IOSCO establish a Principle 7 for dark liquidity on the neutrality of order interaction in dark pools.

Further on fairness, there are several ways forward to that goal as suggested in IOSCO's own Report:

- In those marketplaces where multiple trade execution venues are allowed, equal treatment with respect to rules on pre-trade transparency would ensure that all orders are handled in the same fashion, whether on exchange, in a dark pool, or elsewhere. That would keep the incentive right: where there is a genuine need for an exemption to pre-trade transparency due to the potential for adverse pricing, or because of the market segment for reasons of liquidity, then pre-trade transparency rules should become more flexible. Otherwise, they should not.
- As a rule, capital markets participants benefit from the liquidity of a transparent marketplace, and the trading interest that attracts. Steps away from this channeling of orders, including to dark pools, must be measured by regulators against the costs to be incurred. IOSCO's choice of words is judicious: "the liquidity search challenges for market participants" should be minimized.
- The economic purpose of dark orders on exchanges or in dark pools was to facilitate orders of such a size that the market might respond adversely to the client. But the practice has diverged from that purpose, and today in most cases it is small retail orders that are being run through dark pools. Not exposing those orders to the lit market means

⁴ "Regulatory Issues Arivising from Exchange Evolution," IOSCO report of 2006.

⁵ "Issues Raised by Dark Liquidity," IOSCO Consultation Report October 2010, page 20.

⁶ "Trading Talk," Rosenblatt Securities, 27 January 2011. Among the non-exchange dark pool venues followed by the firm, in December 2010 only a few had trade size that could be considered truly block venues: Liquidnet,

that they might not benefit from potential price improvement, and leads to an impoverishment of public, lit price discovery. The price discovery process is not being completed.

• WFE members seek solidly based global marketplaces: the more capital markets laws and regulations in every jurisdiction follow the common global Principles established by IOSCO, the more stable and fair the system will remain.

This IOSCO Report is highly salutary in the capital markets environment post-2007: regulators and exchange operators have a common objective in seeking to restore confidence on the part of all. Confidence is tied to transparency *and* neutrality: there is a widespread public perception picked up in media coverage of the financial markets that the "game is rigged" in favor of the professionals, and for this reason the neutrality element is as important as the transparency that should prevail. And beyond that broad public perception, no matter what the level of sophistication, there is an inverse correlation between market volatility and dark pool trading, at least as noted in the US market. There is certainty in a lit marketplace. Participants turn to it and need it in troubled times, so it should be cared for at all times.

Sincerely,

Ronald Arculli WFE Chairman Chairman Hong Kong Exchanges and Clearing Thomas Krantz Secretary General

Copy: WFE Board of Directors

WFE members and associates

Pipeline and ITG Posit. The other 12 venues followed by Rosenblatt had average trade order size varying from 340 to only 224 shares per trade, sizes which were not likely to have moved the central market against those orders.

⁷Trading Talk, » Rosenblatt Securities, 27 January 2011, page 9. For the period 2008-2010, as market volatility rose according to the VIX index established by CBOE, traders left dark environments for the lit marketplaces.