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].*"[1]

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."[2] The commenter refers to a "taxonomy of the different types of dark pools was provided by Mittal."[3] Mittal identified five different types of dark pools, that all have certain incentives for operating such a pool.[4]

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."*[5] 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 poo*l 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

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1 Chi-X.

2 Optiver.

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 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.

6 ICI.

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.*"[7]

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 unanimously[8] 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*),[9] although at least one cautioned about making exceptions too broad,[10] and another indicated that a waiver would never be appropriate for *internalizers*[11] 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]

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

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

9 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.

10 AFG.

11 Optiver.

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."*[13] They argued that dark orders and related trading activity are part of the price discovery process.[14] 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.

14 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.

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16 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").

17 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).

18 *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).

19 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").

20 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).

21 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*

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22 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.

23 SIFMA/AFMA.

24 See, *e.g.*, Optiver.

25 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.

26 DBG.

27 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.

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28 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).

29 *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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[30] *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."*[32] 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

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31 Alpha.

32 Chi-X.

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

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34 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.

36 Chi-X.

37 IBF.

38 AIMA.

39 Tata.

40 Liquidnet.

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."[41] 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."

[41] World Federation of Exchanges.