Appendix A

CSA/IIROC Joint Consultation Paper 23-404 Dark Pools, Dark Orders, and other developments in Market Structure

Summary of Comments

In response to the CSA/IIROC Joint Consultation Paper 23-404 (Consultation Paper), 23 comment letters were received. The commenters included buy and sell side representatives, transparent and non-transparent marketplaces and industry associations. A summary of the comments is presented below.

General considerations

Most commenters, which included the vast majority of the buy-side respondents, believed that there were benefits from having dark pools and dark order types. For example, they indicated that dark pools may result in lower trading costs, they provide investors with more choice, encourage competition, allow asset managers to trade large blocks of securities without information leakage, and play an important role in achieving best execution.

The views of the marketplace representatives that provided comments were mixed. Some stressed the importance of transparency in the price discovery process and believed that, while dark pools may serve the investors' interest in the right circumstances, their use may be detrimental to price discovery and liquidity. Others believed that dark pools operate with interdependencies with the transparent marketplaces, and help increase total liquidity and benefit investors. The latter group also highlighted the benefits of dark pools, such as the fact that they protect the confidentiality of institutional block orders, increase liquidity by allowing these orders to interact with other orders, including but not limited to block orders, and that they contribute to price discovery.

A few respondents supported additional regulatory requirements, such as a requirement on dark pools to disclose their method of operation, order routing and communication of indication of interest (IOI) practices, requirements on dealers to be transparent regarding their decisions to route orders to dark pools and how their decisions comply with best execution, or a requirement that only large block trades be executed in dark pools. Some commenters, however, indicated that with the low volume of trading in dark pools (less than 2% of the entire Canadian market) and the lack of empirical evidence to analyze issues relating to Dark Pools, it is premature to consider regulatory action at this time. It was also suggested that there are other issues in the existing market that should be scrutinized by the regulators such as high-frequency trading. One commenter noted that many changes have recently occurred in the marketplaces, and recommended the establishment of a committee of experts to ensure the CSA are kept apprised of issues surrounding rapidly changing markets.

It was also suggested that any discussion of non-transparent trading should expand beyond trading on marketplaces and should consider dealer internalization.

The questions in the Consultation Paper and a summary of the responses are included below.

Question 1 – While trading on Dark Pools has not been extensive in Canada, please provide your views on the actual and/or potential impact of Dark Pools on:

- a) Order size
- b) Price discovery
- c) Liquidity
- d) Market fragmentation
- e) Trading strategy
- f) Client instructions

In your view, what will be the potential impact if the market share of Dark Pools in Canada increases significantly?

Order size

Most commenters were of the view that dark pools would have little effect on order size. Some noted that there has been a general decrease in order size in the Canadian marketplace, but did not attribute this to the emergence of dark pools. Some respondents believed that, when used by large institutions, dark pools could in fact increase order size through the execution of large blocks. However, one buy-side commenter noted that the average trade size on dark pools is very small, suggesting that orders are merely being moved from visible to dark markets.

Price discovery

The majority of the respondents did not believe that dark pools impair price discovery, and some thought that they actually have a net positive benefit to price discovery resulting from post-trade reporting and in some opinions, the ability to attract large orders away from the upstairs market. Some indicated that dark pools have a less substantial negative impact on price discovery than the upstairs market has. However, a few respondents were of the view that dark pools undermine the price discovery process, especially where dark pools attract orders from lit markets. Some thought that they offer little or no value to the price discovery process.

Liquidity

The question of liquidity brought mixed opinions, but most respondents believed that they would have a positive impact on liquidity. Most of those who believed that liquidity was enhanced made the assumption that dark pools were in fact successful in attracting latent interest to the market, and were not simply drawing existing orders from lit venues. Some dealer firms believed that dark pools are merely removing liquidity from visible markets and that, if dark pools are not accessible by everyone, liquidity would in fact be reduced.

Fragmentation

Most commenters agreed that dark pools would add to market fragmentation. Some noted, however, that there is fragmentation in the marketplace already due to the existence of the upstairs market, which caters to big blocks, and dark pools would not increase it. Others thought that the competition and innovation resulting from multiple marketplaces would provide a net benefit despite the inherent fragmentation. Many thought that the increased use of technology in the marketplace, and the fact that marketplaces are increasingly interconnected due to the use of Smart Order Routers (SORs) may address market fragmentation concerns.

Trading strategy and client instructions

The question regarding trading strategy and client instructions was not widely commented upon, however most of those who responded were of the opinion that both trading strategies and client instructions would continue to become more sophisticated and detailed, and that this would be a net benefit to participants. It was noted that dark pools support different types of trading strategies which are important to investors. One commenter questioned whether these sophisticated strategies would come at the expense of the retail investor. One indicated that dark pools increase the use of algorithms, electronic trading and SOR technology, which would allow institutional investors to play a greater role in trading decisions though their direct market access.

Impact if dark pool market share increases significantly

The responses varied. Some thought that increased market share by dark pools would have a positive effect as it may attract previously undisclosed liquidity. Some believed that an increase in market share of dark pools would have little, if any impact on the Canadian market. Other possible consequences identified by commenters were: increased use of technology and associated costs as there will be a need to connect to all marketplaces to access liquidity; narrowing of the spreads; and reduced market impact costs.

Question 2 – Please provide your views on whether there should be a minimum size requirement for orders entered on Dark Pools.

In response to the question of imposing a minimum size for dark pool orders, the responses indicated a split in opinion. Although almost all comments from the marketplaces were against minimum size requirements, the opinions from both dealers and buy-side firms varied. Some felt that this decision should be left up to the dark pools themselves, while others indicated that minimum sizes such as 50 trading units, or \$100,000 CAD value, might work to protect the lit markets and contribute to improved price discovery and liquidity.

Question 3 – Please provide your views on whether Dark Pools should be permitted to send IOIs. If so, what information should be permitted to be included?

The responses varied. Some commenters thought dark pools should be allowed to send IOIs, others that dark pools should be allowed to send IOIs only if their policies are transparent to users. Some thought the IOIs should not be sent at all, as they leak information, which runs counter to the very reason for the existence of the dark pools. A common theme amongst responses was that client or subscriber consent to IOIs, as well as full disclosure of IOI policies by dark pools, were essential. Some commenters believed that issues with IOIs become apparent when these messages are sent to only a small segment of the market. Others felt that that the decision regarding who should receive such messages should be dependent on the structure of the dark pool in question. A couple of commenters indicated that IOIs should be used for routing decisions only, and not trading decisions.

Question 4 – Please provide your views whether or not Dark Pools should be permitted to select which destinations are able to receive IOIs. In your view should the ability to select which destinations receive IOIs be offered to subscribers?

While the views of the respondents were mixed, most thought that allowing dark pools to select destinations for the IOIs they receive would create an unlevel playing field and a two-tiered market with some having access to information that others do not. Some indicated that it should be the subscribers of the Dark Pools that have the ability to select the destination for their IOIs, based on their clients' interest. A few thought that it is important that dark pools have the flexibility to target recipients of communications and that this could be based on commercial relationships, business goals and needs, technology and probability of execution.

Question 5 – In your view, when does an IOI provide sufficient information to require it to be treated like an order that should be subject to pre-trade transparency requirements?

Responses about when an IOI actually becomes an order reflected differing opinions amongst commenters. The information in question relates to details about security symbol, order size, side and price. Many commenters believed that any IOI which establishes certainty in all four factors would constitute an order and should require pretrade transparency. At the opposite end of the spectrum, some felt that any and all information which leaves a dark environment should immediately be transparent to all participants.

Question 6 – What kind of transparency regarding practices of sending IOIs should be made by dark pools to their subscribers?

Generally, respondents agreed that there should be transparency of dark pool practices regarding IOI information. One commenter suggested the information disclosed include a

description of the IOI recipients and of the information that will be included in the IOIs, but most did not specify the type of disclosure that should be provided. A few respondents thought that disclosure of IOI practices should be made not only to subscribers, but also to the broad market.

Question 7 – Should Dark Pools be required to provide full or partial transparency of their orders if a threshold of trading activity is reached?

The views of the majority of respondents were similar with respect to this topic, and most agreed that dark pools should not be subject to these requirements. Some noted that this would undermine the very purpose and value of dark pools.

Question 8 – What are your views on the fairness of broker preferencing?

Most marketplace commenters indicated that broker preferencing was inherently unfair, however regulating the practice could result in greater negative consequences in the form of dealer-sponsored dark pools. Also voicing the same concern about dealer pools were the buy-side respondents, however their opinions on the fairness of broker preferencing were generally mixed. One commenter suggested a minimum transaction size in order for a broker-preferenced match to occur. Responses from dealer representatives varied, with some supporting the practice, and others indicating that it should only be allowed if the marketplace chooses to provide it, and others indicating that pure price-time priority is the only method of ensuring fairness to all participants.

Question 9 – Are there other issues that should be considered in connection with dark pools?

In addition to the issues raised in the responses to Questions 1 through 8, the respondents noted that:

- dark pools should not provide advantages to their users other than pre-trade opacity
- the goal should be to maintain a symbiotic relationship between the dark and lit markets to encourage liquidity
- the dark pools should only be allowed if they provide price improvement
- dark pools should be required to disclose rules and publish rule amendments for
 public comment to allow the public to monitor developments and comment before
 implementation of rules that may impact market structure

It was also noted that the needs of institutional investors in executing large block trades are different than those executing retail orders, as large trades have market impact while small trades do not.

Some commenters reiterated their recommendation that the upstairs market should be reviewed as well, as they believed it is much less transparent and fair than dark pools.

Question 10 - Please comment on the actual and/or potential impact, if any, of Dark Orders on: a) price discovery; b) liquidity; c) clients' execution instructions; d) trading strategy.

Many commenters reiterated their responses to Question 1 when discussing the impact of Dark Orders. In addition, they noted the following:

Price discovery

In response to the question regarding price discovery, some also indicated that visible elements of dark orders (such as the visible portion of an iceberg order) contribute to pretrade discovery, and others thought that dark orders assist in providing price discovery by interacting with visible liquidity.

Liquidity

With respect to the impact of such orders on liquidity, the views were split between respondents that thought dark orders would increase liquidity, for example by attracting latent liquidity which would otherwise wait on the upstairs market or by allowing more liquidity to be brought into the market instead of being negotiated off-market, and others who thought that a natural progression toward dark orders would reduce liquidity.

Client's execution instructions and trading strategy

Some commenters thought that clients may not make full use of dark orders, as they are not aware of the various dark order types. One respondent noted that, while dealers are responsible for best execution and should be the ones making the decision whether to use dark orders, clients should also be aware of the dark orders that their dealers consider for trading.

The commenters agreed that dark orders would increase the options available to any trading strategy, and some indicated that providing traders with more tools to bring liquidity to the market is preferable to restrictions in dark order types.

Question 11 – Please comment on the effect, if any, of the interaction of Dark Orders with visible limit orders on fairness and price discovery.

The majority of respondents had no issues with dark orders interacting with visible limit orders, provided that the visible orders or the visible portion of dark orders, always maintains priority. One commenter was of the view that certain types of dark orders were unfair, and that orders should be subject to a trade-off between the price improvement of dark fills, and the immediacy from lit fills. The commenter felt that no order should be allowed the opportunity to hold both a position in a protected book, as well as the opportunity to execute inside the posted spread. One respondent was of the view that all orders should be visible or partially visible, to interact with visible orders.

Respondents' opinions on this subject began to differ when discussing fully-hidden orders posting at prices inside the prevailing spread. Most commenters representing

marketplaces had no concerns with the practice, however some dealers and some buyside participants expressed reservations. Some felt that minimum tick rules should apply, with no sub-tick pricing allowed, while others believed that only orders that had been priced in accordance with a pre-determined, non-discretionary method (i.e.: mid-point matches) should be able to participate. At the other end of the spectrum, some were of the opinion that no fully-hidden orders should be allowed.

Question 12 – Should there be a minimum size requirement for certain Dark Orders? If yes, please explain.

The majority of commenters thought there should be no minimum size requirement, for reasons including the fact that this would limit alternatives available to investors, or that such restrictions would create a two-tiered market with reduced opportunities to trade. A few thought there should be a minimum size requirement, and others thought it should be up to the marketplace to decide.

Question 13 – Should a transparent marketplace allow fully-hidden orders to post at prices inside the prevailing spread (or should at least a portion of the order be required to be exposed, thereby removing the spread)?

The responses were split between those who believed that hidden orders should be allowed to post inside the prevailing displayed spread (these being mainly marketplace and some dealer commenters), and those who thought transparent marketplaces should only execute trades at the best bid or best ask. Reasons for allowing trades to be executed at prices inside the prevailing spread were the potential price improvement and compliance with best price and order protection obligations, as well as the ability of marketplaces to create innovative products that address customers needs to achieve best execution. Reasons against orders posting at prices inside the prevailing spread were lack of consistency with the transparent order types, and concerns regarding the loss of price priority by visible orders.

A few respondents indicated that a portion of the hidden orders should always be exposed, thereby limiting the spread. One of the reasons given was to allow market participants fair access to information.

Question 14 – Should marketplaces be required to provide priority to visible orders over Dark Orders at the same price?

The vast majority of respondents thought that visible orders should be given priority over dark orders at the same price, for reasons including: the fact that market participants taking the risk to display their order should be rewarded by being given priority; to promote price discovery; and the risk that liquidity would be negatively impacted if dark orders were given priority, as there would be no incentive to post transparent orders.

One commenter however, thought that whether to give priority to visible orders should be a marketplace's choice and should not be mandated.

Question 15 – Are there other issues that should be considered in connection with Dark Orders?

Commenters raised a few items for consideration, as follows:

- technology advancement should not be impeded, as long as trading practices are not manipulative and deceptive
- whether last sale price information should be marked differently if it is a dark to dark order or a dark to light order
- whether trades resulting from dark orders within the spread should set the last sale price
- whether dark orders executing within the National Best Bid and Offer (NBBO) spread should be marked as dark order trades

Question 16 – Please comment on the actual or potential impact if any, of market pegged orders on: a) Price discovery; and b) Fairness

Most commenters, especially buy-side and dealer representatives, thought pegged orders enhance liquidity and price discovery. Some noted that dealers already use pegged orders through both trading systems and algorithms and thought that such orders, if available at the marketplace level, add fairness as they will be available to all participants. A few were of the view that pegged orders contribute to price discovery and are fair, but only if a portion of such orders is visible. Some commenters stressed the importance of being able to re-price orders on a timely basis, and noted that the introduction of pegging functionality at the market level reduces the risk and inefficiencies of limit order re-pricing, which used to be done manually.

The views of marketplace respondents were mixed. For example, some thought that pegged orders can provide additional liquidity but only if they are dark, while another commenter thought that they should be displayed in order to provide price and volume discovery.

Question 17 – Although this paper has not specifically addressed pegged orders that execute at the mid point of the NBBO, in your view, should market pegged orders be allowed to execute at prices unavailable to transparent orders (e.g. at a price between the bid and the ask when the spread is a single trading increment)?

There was variation in opinion with respect to the topic of sub-penny execution. Some felt that it was inconsistent and unfair to the general market to allow dark pools to offer sub-penny pricing, and not permit visible marketplaces to provide the same, and a few believed that allowing sub-tick execution penalizes those participants who have placed visible bids. Conversely, other commenters thought that by not allowing pegged orders to

execute at the midpoint of the NBBO, this would restrict trading options and it would not be possible to provide price improvement where there is a one-cent spread.

Question 18 – Although this paper has not specifically addressed pegged orders that are fully-hidden, in your view are there any issues that arise due to fully hidden market pegged orders?

As set out before, some respondents thought that pegged orders should be fully hidden in order for them to provide additional liquidity, while others thought that if fully hidden, they do not contribute to price discovery. One commenter added that, with proper regulation, fully hidden orders would not take priority from displayed orders.

Question 19 – Are there other issues that should be considered with regard to market pegged orders?

Other matters raised were:

- the fact that automatic re-pricing of pegged orders at the marketplace level will reduce message traffic
- the fact that fully hidden pegged orders will have less of an impact on market data messaging
- there was a suggestion that the regulators set out a 10% minimum increment for the pegged order's execution price
- there was a suggestion that the regulators analyze who uses marketplace pegged orders and why they are used, and should determine whether investors are disadvantaged by these order types

Question 20 – What is your view of a marketplace SOR taking into consideration hidden liquidity posted on that marketplace when making routing decisions? Is it appropriate? Should the information be required to be provided to other participants? Should a marketplace's SOR be allowed to take into account hidden liquidity only after all visible liquidity at the same price on all marketplaces is executed against?

Respondents were generally in agreement that a marketplace SOR should be allowed to take into account hidden liquidity on that marketplace, and most saw no issues with this practice as long as subscribers were fully informed. However, a number of participants felt that visible liquidity across all marketplaces should be exhausted first, and that SORs should not be developed in a way that disadvantages those who post visible orders.

Question 21 – Is the practice of a SOR taking into account hidden liquidity posted on a marketplace an example of internalization of order flow? What are the similarities and differences with a dealer internalizing order flow?

A few commenters thought this practice would be akin to internalization of order flow, as the SOR would be accessing information that is not communicated to all marketplace participants. However, most respondents did not think taking into account hidden liquidity posted on a marketplace is internalizing. The latter group noted that internalizing only occurs when orders from the same dealer interact, and that SORs taking into account hidden liquidity do not take into account any specific participant, and crosses are merely coincidental.

Question 22 – What are your views on internalization generally?

Most respondents, especially dealer and buy-side representatives, were in support of internalization. They thought the practice reduces latency and trading and clearing costs and improves client fill rates. However, some commenters, especially the marketplaces, thought internalization can harm the quality of the markets by weakening price transparency, liquidity and price discovery. A few thought that internalization should be subject to additional regulatory oversight.

Question 23 – What is your view on databasing?

The majority of commenters had no issue with the concept of databasing, and many felt that innovation in technology should be considered a benefit.

Question 24 – Please comment on whether there are other issues that should be considered in connection to SORs using hidden liquidity in routing decisions.

Commenters raised a number of points, including:

- regulation should not stifle innovation
- that SORs use of hidden liquidity has occurred in the U.S. without negative impact
- that use of hidden liquidity should be subject to providing clear transparency on how it works

Question 25 – Are there any other issues not discussed in this paper that should be considered for discussion at the round table that will be convened after the publication of this paper?

A number of issues were raised for consideration, as follows:

- the need for regulatory scrutiny of high frequency trading and electronic market making
- the need for scrutiny of activities occurring in the upstairs market

- the impact on technologies of increased message traffic due to market pegged orders and certain dark orders
- the need to discuss and review regulatory developments in US and Europe to reduce potential for regulatory arbitrage
- establishing acceptable minimum standards to operate ATSs and dark pools

Question 26 – In what way if any, do you believe that the combined potential of these developments represents a risk to the market?

There were different responses to this question. Some commenters thought that there is no evidence of systemic risk resulting from dark pools and dark orders, others noted a potential negative impact of dark pools and dark order types on price discovery, market fairness and integrity. One respondent thought that the market developments discussed in the paper may have a unique impact on Canada, where there are a few players managing large pools of liquidity, and stressed the importance of price discovery.