



IRESS Forum White Paper

Best Execution in an Increasingly
Complex Market Environment

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Introduction

The level of attendance at our recent IRESS Forum – “Reconciling Business Objectives and Regulatory Obligations” - held on October 15th, 2015, highlighted a significant desire on the part of financial markets participants to access information related to the impact of recent market structure changes in Canada.

Our goal for the forum was to provide – as a significant and market neutral player in the Canadian financial marketplace – a mechanism through which we could facilitate dialogue between brokers, regulators and vendors.

This white paper is intended to support that dialogue by providing an overview of best execution in Canada and other jurisdictions, and the ways in which best execution is evolving as the Canadian markets continue to grow in complexity.

It is intended to provide all market participants with a stronger understanding of the role that best execution has played in both trading and regulatory development. It also provides a high level overview of some of the considerations that market participants may want to include when determining their own best execution policies.

We hope that you find the white paper both informative and useful. If you wish to discuss any of the issues raised in the white paper in greater detail, please do not hesitate to reach out to your IRESS Client Management Representative, or to:

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Disclaimer

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Executive Summary

Market regulators across the world are challenged to create an adaptive, innovative marketplace while protecting investors and minimizing systemic risk. One of the most important principles protecting the interests of investors cross-jurisdictionally is 'best execution'.

In Canada, the practice of best execution has been largely shaped by the "Order Protection Rule", which obligates all executing brokers to trade at the best buy or sell price available across all Canadian marketplaces. This essentially requires all brokers to continuously monitor all markets when executing a given trade, imposing a significant complexity and cost burden. To comply, both brokers and the vendors supplying exchange access and trading systems must support wide-spread market surveillance through technologies such as smart order routers (SOR). However, that burden of complexity is somewhat offset by regulatory simplicity. Firms simply have to ensure that a given trade is executed at the best buy or sell price available.

Recently, however, the introduction of the TMX Group's Alpha Exchange - which will be listed as an 'optional market' – is forcing a shift from considering best execution primarily as a function of best price, to best execution as a less prescriptive function based on a combination of price, availability of liquidity, speed of execution and cost of execution. The intent remains investor protection, but the method for achieving that is significantly more nuanced than the OPR. A number of jurisdictions such as the UK, Europe and the US have already tackled the challenges that such a shift engenders.

In essence, a principles-based best execution regulatory framework will require brokers to develop, and defend, their own documented best execution policies. Some of the considerations that should be taken into account when developing a best execution policy include:

- 1) Understanding and evaluating your execution processes:** When developing a best execution policy, a firm should understand their order flow, internal infrastructure and access to marketplaces, and develop and tailor procedures that:
 - Outline a process designed to achieve best execution
 - Require the participant to follow the client's instructions and to consider the investment objectives of the client
 - Include a process for taking into account order and trade information from all appropriate marketplaces and foreign organized regulated markets
 - Describe how the participant evaluates whether best execution was achieved.

- 2) Evaluate market access, routing and monitoring processes:** Firms should also consider:
 - Whether best execution practices enables access to all appropriate market places
 - If there is appropriate access to unprotected markets and foreign organized regulated markets
 - Whether internal controls and monitoring are sufficient

- Policies and procedures to comply with IIROC's new disclosure requirements¹
- Whether any conflicts of interest exist in relation to the best execution policy and practices

Once a policy and procedure have been established, a process for periodic review should be put in place.

3) Establish Effective Best Execution Governance: In developing governance structure, firms should consider the following:

- Establish a working group or internal committee to oversee best execution or determine who will conduct the review
- Develop a clear mandate for the working group or internal committee that is well documented. The mandate should outline accountability and structure to monitor and enhance best execution performance. It should outline the information sources used and describe the types of events that would trigger a review.
- Train employees on the application of best execution policies and procedures.²

¹ Proposed Provisions Respecting Best Execution – Rule 3300 Best Execution of Client Orders, 10Dec2015

² Proposed Provisions Respecting Best Execution – Rule 3300 Best Execution of Client Orders, 10Dec2015 will require dealer members to train staff on the application of the obligation

Introduction

This paper examines best execution regulation in four jurisdictions, Canada, Europe, the UK and the US, by comparing the following three aspects: policies and procedures, disclosure and payment for order flow. It also explores some of the market structure challenges specific to Canada.

Recognizing the complexities and challenges surrounding best execution, this paper provides some practical guidance and tactical considerations on how firms can begin to define a suitable Best Execution Framework. The aim is to provide areas for consideration, of value to firms operating across a range of diverse business models.

Best Execution in an Increasingly Complex Market Environment

Market regulators have a clear challenge: to create a regulatory environment that is adaptable to rapid changes, encourages innovation, minimizes systemic risk and provides an appropriate level of investor protection. Balancing these opposing objectives as markets become increasingly complex is not easy in practice. Conflicting priorities among market participants with different sets of expertise makes it difficult to apply the appropriate level of regulation to level the playing field without stifling innovation.

One of the most important and fundamental principles designed to protect the interests of investors is the best execution obligation. In light of increasingly automated markets and recent advances in technology, regulators are issuing guidance to reiterate and refine best execution obligations and providing general guidance on how to comply.

“The challenge for market regulators is clear: to create a regulatory environment that is adaptable to rapid changes, encourages innovation, minimizes systemic risk and provides an appropriate level of investor protection. ”

Background

Throughout the history of equity markets, a stock exchange featuring national listings has been the dominant equity trading venue in virtually all jurisdictions, unchallenged except by regional exchanges that serviced the specific needs of local markets.

In the 1980's, the one exchange market model was eclipsed in the U.S. when electronic communication networks (ECNs) such as Instinet and Posit entered the market, challenging the incumbent exchanges with lower prices, different order execution methods and faster speeds of execution. It was not until a decade later that Canada followed the U.S. lead, when in 2001, it liberalized its market structure to allow for the entry of multiple alternative trading systems (ATS). The first entrants to the Canadian market failed to capture significant market share and it was not until 2008, when industry led initiatives such as Chi-X and Alpha entered the market, that there was a shift in liquidity to these new venues.³ In Europe, it was the introduction of Markets and Financial Instruments Directive (MiFID) and the repeal of the so called 'concentration rules'⁴ that led to market competition. The concentration rule allowed national authorities to stipulate that retail investor orders be executed only on a 'regulated market.' The dismantling of the concentration rule led to the birth of alternative venues in Europe.

Fragmentation – Consequence of Competition

The result of the new regulations - such as Regulation National Market System (Reg NMS) in the U.S., MiFID in Europe and National Instrument 21-101 – Marketplace Operation (N1 21-101) in Canada - is a fragmented market model. As recently as 2001, Canada had only one senior equity market. Within the last 15 years, the Canadian equity market ecosystem has become far more complex with 10 trading venues that display orders; the most recent being TSXA and Aequitas Neo Exchange ('Aequitas').⁵

Consequently, while on the surface it seems that the markets have become more efficient, a key question concerning market fragmentation is whether it improves the quality of markets – in other words, their ability to facilitate trades quickly and at fair prices.

³ Canadian National Stock Exchange (CNSX), Perimeter's BlockBook and Shorcan ATS were some of the first venues to challenge the TSX exchange. Chi-X was originally owned by Instinet. Alpha was developed and owned by market participants but it was later merged with the TSX when it was acquired by Maple and most recently is known as TSX Alpha change (TSXA). Recently TSXA introduced a new operating model

⁴ Article 14(3) of the 1993 ISD

⁵ 10 protected, 1 unprotected market that displays orders

Competition among trading venues has been associated with an overall reduction in trading fees in Canada. Increased competition has also led to product innovation and performance improvements. Consequently, while on the surface, it seems that the markets have become more efficient, a key question concerning market fragmentation is whether it improves the quality of markets – in other words, the ability to facilitate trades quickly and at fair prices.

Until recently, the rules, technologies and practices in Canada have been designed to unify trading across different venues, making it less likely that market fragmentation would result in segmented liquidity.⁶ In February 2011, the Order Protection Rule (OPR) was introduced as a result of changes made by the Canadian Securities Administrators ('CSA') to Part 6 of National Instrument 23-101, Trading Rules (NI 23-101). UMIR 5.2, the "best price" rule which preceded OPR, was repealed as a result.

The OPR is intended to protect the discovery process and ensures that an investor, particularly the retail investor, receives the best price and is not 'traded through'. OPR is an obligation that extends to the marketplace as a whole. This means that market participants must monitor all prices on all available venues regardless of the liquidity available on the marketplace.

The rules governing the market structure in Canada are similar to those governing trading in the U.S. equities markets. Brokers and marketplaces are required to respect the OPR, which mandates that orders must be routed to the marketplace with the best-priced orders available on "protected"⁷ lit markets. As a result, the challenge for market participants is that although connectivity to all marketplaces is not required, it becomes difficult to see how a given broker can meet the stated obligation without visibility to all marketplaces.

The Role of Smart Order Routers (SORs)

In order to access marketplaces directly in Canada, smart order routers (SORs) – which can be defined as an application that automatically routes orders to markets in compliance with order protection mandates - are generally used by most, but not all brokers to meet their regulatory obligations. A recent Investment Industry Regulatory Organization of Canada (IIROC) survey, for example, showed that 82 of 143 surveyed used smart order routers (SOR) to access the market.⁸ To be effective, however, SORs need to be maintained to reflect current market conditions, which can be costly and difficult. Additionally, the entry of every new trading venue raises the amount of market activity that participants have to monitor. Connection costs can vary depending on the provider and can have a significant impact on profitability, especially for smaller firms.⁹

⁶ Introduction of TSXA has changed this

⁷ UMIR defines a "protected marketplace" as a marketplace that: disseminates order data in real-time and electronically through an information processor or one or more information vendors in accordance with the Marketplace Operation Instrument; • permits dealers to have access to trading in the capacity as agent; • provides fully-automated electronic order entry; and • provides fully-automated order matching and trade execution

⁸ IIROC notice - Best execution survey results- March 28, 2014; the others use an executing participant

⁹ Precise costs are difficult to determine since several exchanges provided bundled services, making comparison challenging.

Some participants believe that the OPR acts to support marketplaces that would not be viable otherwise, resulting in increased fragmentation. This fragmentation in turn has an impact on market quality and complexity, and direct and indirect costs for participants.

The fundamental difficulty with the OPR is that although market participants fought for greater competition and more choice, they must have processes for taking into account order and/or trade information from all available marketplaces, regardless of whether the market offers sufficient liquidity. They must then determine whether to access the marketplace directly, or use an executing participant to route an order to a particular marketplace. This can lead to inefficiencies if market participants are captive consumers of marketplace services in order to comply with OPR.

The OPR Under Review

Concern over costs and inefficiencies resulted in the Canadian Securities Administrators (CSA) conducting a review of the OPR to determine what changes could be made to reduce the extent to which it acts as a support for marketplaces, and to mitigate the related costs. The CSA recognized that any changes must be balanced against both the original objectives and intentions of the OPR, and considerations related to the effect on competition and innovation.

One of the proposed amendments resulting from the review is the introduction of a market threshold of 5% market share of the adjusted share volume and value of trades on a visible marketplace. An anticipated key benefit of implementing a market threshold would be that liquidity will become more concentrated on fewer exchanges. However, many have argued that the introduction of market thresholds may result in too little choice, increased market complexity and negatively impact innovation.

Another approach would be to eliminate the OPR rule all together and rely on the Best Execution Obligation as a means to protect the retail investor and maintain market integrity.

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Best Execution – What is it?

Best execution is a responsibility imposed on the dealer community to provide customers with the most advantageous order execution. While its definition may vary among regulatory jurisdictions, its intention remains the same. It is a fundamental mechanism for maintaining market integrity, creating a consistent price formation process and delivering good outcomes for clients. The bottom line is that the stability, soundness and sustainability of financial markets and the transparency of the pricing process relies on market participants to take the necessary steps to achieve best execution for their clients.

The IIROC, references the Universal Market Integrity Rules (UMIR) on best execution¹⁰ as follows:¹¹

In seeking the “most advantageous execution terms reasonably available under prevailing market conditions”, the Market Regulator would expect that the Participant would take into account a number of general factors, including:

- *the price at which the trade would occur*
- *the speed of execution*
- *the certainty of execution*
- *the overall cost of the transaction*

In essence, this is a principles-based framework in which the participant should:

“take into account ‘prevailing market conditions’ and consider such factors as:

- *prices and volumes of the last sale and previous trades*
- *direction of the market for the security*
- *posted size on the bid and offer*
- *the size of the spread*
- *liquidity of the security*

This means that brokers need to exercise sound judgment, and maintain policies, procedures and an appropriate governance structure to ensure best execution is achieved.

¹⁰ Please see http://www.iiroc.ca/industry/rulebook/Documents/UMIR0501_en.pdf

¹¹ The factors have been tweaked in the Proposed Dealer Member Rule 3300. The proposed new rule also includes the factors that must be considered in executing client orders for OTC securities. Section 3300.3 b (iii)

Market Factors Impacting Best Execution

The introduction of multiple marketplaces and increasing automation amplifies the complexity under which best execution can both be performed and defended; however other market structure changes and advancements in technology have also impacted execution. Low latency trading, smaller trade sizes, payment for order flow and speed bumps have also made it more challenging for dealers to ensure they have provided their clients with the best execution.

The rules on the application of best execution are designed as a 'catch all' and are not prescriptive in many areas. This means that brokers need to exercise sound judgment, and maintain policies, procedures and an appropriate governance structure to ensure best execution is achieved.

For the executing broker, one of the challenges of best execution is to develop a best execution policy that reconciles their regulatory obligations with their business objectives.

Best Execution in Practice

Few are likely to disagree with the principles behind best execution but establishing a supporting governance structure has been more challenging. In 2014 the UK published findings from a thematic review ahead of the enhanced EU rules on best execution.¹² One of the key findings was that most firms are not doing enough to deliver best execution through adequate management focus, front-office business practices or supporting controls. Results from the 2013 IIROC survey on best execution also indicated inadequate post-trade supervision of best execution practices.

Best Execution in the UK and Europe

UK's thematic review of best execution practices highlighted that more has to be done to ensure that market participants fully understand best execution obligations. In Europe, the successor to MiFID, MiFID II, introduces several changes for investment firms executing client orders:

- 1) It puts greater demands to have in place an execution policy that is detailed, clear and in easy-to-understand language;
- 2) It requires public disclosure of the top five execution venues by asset class where client orders were executed in the preceding year; and,
- 3) It demands greater oversight of conflicts particularly in the area of third party inducements.

¹² Markets and Financial Instruments Directive II (MiFID II)

Meanwhile UK firms are being told to “improve their understanding of the scope of their best execution obligations, the capability of their monitoring and the degree of management engagement in execution strategy.”¹³

Best Execution in Canada

In Canada, IIROC recently published proposed amendments to best execution requirements to clarify regulatory expectations.¹⁴ The proposed rule requires dealer members to have tighter controls for best execution policies and procedures, staff training and governance arrangements. The rule will improve market transparency by introducing new requirements for dealer members to disclose information concerning order handling practices and market data feed information. The rule consolidates existing Universal Market Integrity Rules (UMIR) best execution requirements, Dealer Member Rule requirements for fair pricing and over-the-counter (OTC) securities into a single Dealer Member Rule.

Components of Best Execution

Policies and Procedures

Both the Financial Services Authority (FCA) and the IIROC review indicated a weakness in best execution governance. The obligation under UMIR requires all dealer members to make reasonable efforts to achieve best execution. To meet the “reasonable efforts” test as outlined in the Companion Policy to National Instrument 23-101 Trading Rules (23-101 CP), a dealer should have policies and procedures that require it to follow a client’s instruction and that outline a process designed to achieve best execution. These policies and procedures should describe how the dealer evaluates whether best execution was obtained and should be regularly and rigorously reviewed.

In a recent regulatory notice issued by the Financial Industry Regulatory Authority (FINRA), guidance was provided on what constitutes a ‘regular and rigorous review’: Firms must determine whether any material differences in execution quality exist among the markets trading the security and, if so, modify FINRA member's routing arrangements or justify why it is not modifying its routing arrangements.¹⁵

The IIROC survey showed that only three quarters of the dealer members surveyed have procedures specifically in place to supervise compliance with best execution.

¹³ Thematic Review TR 14/13, Best Execution and Payment for Order Flow, July 2014. Notably, UK and Europe do not have OPR

¹⁴ Proposed Provisions Respecting Best Execution – Rule 3300 Best Execution of Client Orders, 10Dec2015

¹⁵ Regulator Notice 15-46, Best Execution Guidance on Best Execution Obligations in Equity, Options and Fixed Income November 2015

Similarly in the UK, firms must establish and implement effective arrangements for complying with the best execution obligation, including an order execution policy that describes how these arrangements will operate. Furthermore the FCA requires best execution policies to be reviewed at least annually. Although MiFID II provides better guidance on the contents of a best execution policy than MiFID, it is structured as a 'catch all' and is not prescriptive.

The IIROC survey showed that only three quarters of the dealer members surveyed have procedures specifically in place to supervise compliance with best execution. Not all firms were performing internal testing of compliance but most that were testing compliance were retaining records. Proposed Rule 3300 attempts to address some of the weakness identified in the survey by prescribing tighter governance requirements. Similar to the requirements established in the UK, dealer members will be required to review policies and procedures at least annually and provide greater detail on the methodology used to achieve best execution within their policies and procedures.¹⁶

In a recent survey published by IRESS¹⁷, respondents indicated that the ability to demonstrate regulatory compliance with best execution obligations is a dominant concern.¹⁸ One of the main reasons contributing to this is the uncertainty among firms about the meaning and regulatory impact of the new market structure resulting from the introduction of TMX Alpha, Canada's first unprotected lit market.¹⁹

¹⁶ Section 3300.5 of Proposed Rule 3300; a dealer member must outline a process for the review and retain records of its reviews of best execution policies and procedures and any material decisions and changes made for five years.

¹⁷ http://www.iress.ca/_/media/Files/Conference/IRESS_Results_of_Order_Protection_Survey_New_Market_Structure.pdf

¹⁸ IRESS Report, Results of Order Protection and New Market Structure Survey, 15 August 2015

¹⁹ TMX Group received approval from the Ontario Securities Commission for changes to its TSX Alpha Exchange trading model in April 2015

Comparison of Requirements for a Best Execution Policy by Jurisdiction

	Canada (IIROC & CSA) ²⁰	Europe (MiFID)	UK (FCA)	US (FINRA) ²¹
Content of an Execution Policy	<p>A dealer or adviser should be able to demonstrate that it has, and has abided by, its policies and procedures that (i) require it to follow the client's instructions and the objectives set, and (ii) outline a process designed to achieve best execution. The policies and procedures should describe how the dealer or adviser evaluates whether best execution was obtained and should be regularly and rigorously reviewed.</p>	<p>MiFID did not explicitly detail the exact content of an execution policy. MiFID II provides better guidance and states that an execution policy must be explained in <i>sufficient detail</i> and be <i>easily understandable</i>. In its Final Report, ESMA requires that this information is customized according to the class of financial instrument²² and type of service provided, and the relative importance of each factor should be explained. In addition to explaining how the best execution factors are taken into consideration, ESMA requires that firms also summarize:</p> <ul style="list-style-type: none"> • how venue selection occurs; • the specific execution strategies employed; • the procedures and processes used to analyze the quality of execution obtained; and • details of how the firm monitors and verifies that the best possible results were obtained for their clients. <p>In the Final Report, ESMA further explains that where fees differ by execution venue, the firm must provide the clients with sufficient information to allow them to understand both the advantages and the disadvantages of the choice of one execution venue or entity over another made by the firm. ESMA adds that where "<i>the firm invites the client to choose the execution venue or entity this information shall be fair, clear, not misleading and sufficient to prevent the client choosing one execution venue or entity rather than another on the sole basis of the price policy applied by the firm.</i>" Retail clients should be provided with a summary of the execution policy, focusing on total costs and providing a link to the most recent execution quality data (which will be published according to certain technical rules to be set in 2015 by ESMA).</p>	<p>Firms' arrangements and policies need to support consistent delivery of best execution. Policies must be able to accurately reflect relevant changes to market structure, the entry or exit of market participants or significant changes in technology. Furthermore, firms need to ensure that order execution arrangements and policies reflect the diversity of execution arrangements for all relevant asset classes, as well as covering all the execution factors and enabling them to assess these factors in light of the execution criteria. All firms are required to review their order execution arrangements and policies at least annually.</p>	<p>A member that routes customer orders to other broker-dealers for execution on an automated, non-discretionary basis, as well as a member that internalizes customer order flow, must have procedures in place to ensure the member periodically conducts regular and rigorous reviews of the quality of the executions of its customers' orders if it does not conduct an order-by-order review.</p>

²⁰ N1 23-101 4.1(3.) New Rules have been proposed. Refer to Proposed Provisions Respecting Best Execution – Rule 3300 Best Execution of Client Orders, 10Dec2015

²¹ FINRA, 5310

²² MIFID 11 covers all classes of instruments, not just equities

The Impact of Recent Market Changes in Canada on Best Execution

One might argue that the Alpha exchange and the introduction of speed bumps are all part of the evolution of equity market structure. In one respect, the Alpha exchange is no different from any other new venue. It has developed a trading model aimed at addressing inefficiencies and creating value to a particular investor segment to which it will compete with other venues. A speed bump of one to three milliseconds is part of its trading model, just like a speed bump is part of Aequitas' trading model or the IEX model in the US.²³

For executing brokers, the impact of Alpha can be viewed as similar to the earlier introduction of dark marketplaces, and the resulting changes to routing strategies - as well as adjustments in best-execution policies - are part of the process of accommodating change.

It is perhaps too early to understand the ultimate implications of these market structure changes, but they do raise the issue of how to apply best-execution in a hybrid context. Broker dealers will need to review the structural changes now taking place in the Canadian market and re-evaluate their routing strategies and best execution policies.²⁴ In FINRA's recent guidance, it reiterated that in order to satisfy best execution, firms must compare the quality of the executions it is obtaining via current order routing and execution arrangements (including the internalization of order flow) to the quality of the executions that it could obtain from competing markets.²⁵

IRESS's recent survey indicated that firms were more or less evenly split with respect to their intentions regarding market access following the market structure changes, with a slightly higher percentage not planning to disconnect marketplaces. Some customers have not yet determined how best to integrate Alpha into their trading strategies, and have not optimized their routing to interact with Alpha.

It is perhaps too early to understand the ultimate implications of these market structure changes, but they do raise the issue of how to apply best-execution in a hybrid market structure.

²³ The Aequitas Neo Exchange was launched in March 2015. IEX is buy side owned ATS operating in the US

²⁴ IIROCs Proposed new rule 3300 will make it mandatory to review policies and procedures at least once a year and whenever there is a material change in market structure or the trading environment

²⁵ FINRA, Regulatory Notice, 15-46, Best Execution, November 2015

Canadian regulators have tried to accommodate innovation, as they have done in the past. However, in doing so, non-protected visible marketplaces have been introduced into the Canadian marketplace, creating additional fragmentation and greater market complexity.

On the other hand, the introduction of non-protected visible marketplaces does provide participants more discretion on how their orders are executed. Ultimately, if Alpha is successful and captures market share, it will demonstrate that innovative competitive forces can drive liquidity.

Transparency and Disclosure

One way to improve investor decisions is to provide greater market transparency through information and disclosure. Many trading venues publish the merits of their system by providing information on the volume of shares traded, price improvement or fill rates. This voluntary information is beneficial, but it does not allow for adequate comparison because the data is not calculated and displayed in a uniform manner. Some market participants in Canada believe that greater transparency and disclosure is needed to improve investor confidence and eliminate conflicts of interest. Any form of increased transparency, is helpful to the buy-side to assist with broker selection and measure performance.

The U.S. is by far the most transparent market, having implemented the consolidated tape which pools trade reports from multiple marketplaces into one market data feed. This enables investors to have real-time market information. Additionally, the U.S. has also addressed market fragmentation with the SEC's implementation, in 2001, of new rules to increase the public visibility of execution quality of U.S. securities.²⁶

SEC rule 11Ac 1-5 requires U.S. market centres to publish monthly reports that include uniform statistical measures of execution quality. To facilitate comparisons across market centers, the Rule adopts basic measures of execution quality, such as effective spread, rate of price improvement, fill rates, and speed of execution, and sets forth specific instructions on how the measures are to be calculated. Furthermore, the SEC requires broker dealers to disclose order routing information, including any data on payment for order flow on a quarterly basis.²⁷ The intent behind these rules is to give all public investors tools to make more informed decisions. There is an ongoing debate however, on how effective these disclosures are in practice.

The intent behind these rules is to give all public investors tools to make more informed decisions. There is an ongoing debate however, on how effective these disclosures are in practice.

²⁶ In 2001, the SEC issued rule 11Ac1-5 and 11Ac1-6

²⁷ 11Ac1-6

The Challenges of MiFID

One shortcoming of MiFID was its failure to provide a market mechanism to bring together pricing data - like the U.S. consolidated tape - to ensure transparency and best execution when trading on multiple platforms. Market fragmentation in the UK and Europe has meant that investors are struggling to efficiently locate and access liquidity, and to identify the venues with the best price.

Consequently, many brokers and buy side participants create their own tape to ensure that they are achieving best execution for their clients, and use this as a way to competitively differentiate their service. The retail customer, however, cannot independently verify this information. This makes it very difficult for the retail customer to judge the merits of the trading system being offered to them.

MiFID II tries to address some of the limitations of MiFID and allows for a consolidated tape provider (CTP), however a CTP has not been named.²⁸ It also addresses post-trade disclosure through enhancement to disclosure requirements. In the new rules, trading venues and systematic internalizers²⁹ are required to make data relating to the quality of execution of transactions available to the public, at least annually, without charge. Furthermore, firms will be required to inform the client where the order was executed following each execution. Firms will also be required to summarize, and make public on an annual basis, the top five execution venues - based on volume - on which they executed client orders in the preceding year. They will also be required to provide information on the quality of the executions obtained.

The updated IROC rules include provisions for dealer members to provide clear and accessible disclosure to clients regarding their best execution order handling and routing practices. The identity of any marketplaces, foreign organized regulated markets and intermediaries that may be used to route an order must be included in the description along with a statement of any compensation arrangements that may have occurred in regards to the execution of a client order. The rule also introduces a new requirement on dealer members that provide market data services to provide a description of any missing data in their feed.³⁰

Balancing and synchronizing increased innovation with consistent and sufficient investor protection will continue to challenge regulators. While implementing some rules for disclosure will improve market intelligence and allow for a fairer system, any new rules will need to be reasonable and not impose undue costs on the market.

²⁸ Consolidated Tape Provider is defined in MiFID II as a provider which will consolidate information in a continuous electronic stream, and to make it publically available as close to real-time as possible, and on a reasonable commercial or free basis after a 15 minute delay.

²⁹ MiFID term for market-makers that match customer orders internally

³⁰ IROC Proposed Rule Best Execution of Client Orders Section 3300.8

Payment for order flow (PFOF)

When developing an operating model, new trading venues tend to favour price competition rather than product differentiation. In doing so, the market has developed pricing tactics such as rebates and differential pricing to post and take liquidity. The regulatory stance to the PFOF varies across jurisdictions.³¹ In the UK and Europe, PFOF is strictly forbidden, but in the U.S it is allowed as long as it does not interfere with a broker dealer's duty of best execution.³²

European regulators view the receipt of PFOF as a conflict of interest between the firm's interests and the interests of its clients which may damage the interests of the clients and compromise compliance with best execution rules. A new provision in MiFID II prohibits PFOF:

*'Firms may not receive any remuneration, discount or non-monetary benefit for routing client orders to a particular trading venue or execution venue which would infringe the requirements on conflicts of interest or inducements.'*³³

Despite having guidance in place, FCA's thematic review revealed that a small number of firms continued to receive PFOF by changing the description of the service they provide to clients.³⁴

The SEC rules allows for payment for order flow as long as the payment has been properly disclosed and that it does not interfere with a firms best execution obligations. Firms must disclose in writing when an account is opened and on each trade confirmation whether they are receiving payment for order flow, and if they do, a detailed description of the service.³⁵ The SEC has taken enforcement action in recent years for improper disclosures and other violations regarding the routing of retail orders and in recent guidance, FINRA has stressed that firms should carefully evaluate its receipt of PFOF and the impact of such practices on execution quality.³⁶

Technically, Canada does not allow for PFOF.

Alpha's Impact on Order Flow and Best Execution

The vision behind TSX Alpha is to keep retail flow within Canada's borders by enabling larger retail blocks to be executed in one piece in Canada, rather than in the U.S where retail orders can receive guaranteed minimum fill sizes, price improvement and rebates directly from market making firms who prefer to trade against retail flow.

The objective of Alpha is both sound and innovative, but some critics say that the pricing model appeals to HFT markets that have a speed advantage in cancelling the order, compared to

³¹ PFOF is payment for order flow, an arrangement whereby a broker receives payment from market makers, in exchange for sending order flow to them.

³² FINRA provides guidance Regulatory Notice, 15-46, Best Execution, November 2015

³³ Article 27(2)

³⁴ FCA, finalized guidance 12/13, May 2012

³⁵ Disclosure is also required on an annual basis

³⁶ New York firm A.R. Schmeidler & Co and Goelzer Investment Management, ³⁶ FINRA, Regulatory Notice, 15-46, Best Execution, November 2015

other market participants attempting to interact with the order. The advantage of larger fills is appealing however; unlike the U.S. wholesale market, Alpha does not guarantee fills or offer price improvement which adds complexity when determining best execution.

Market participants will have to consider the probability of getting a fill on Alpha before the order is placed. For resting orders, they will also have to evaluate the benefit of being at the top of the book versus the increased cost to post on Alpha. Furthermore, executing brokers will have the option to bypass passive liquidity posted on an unprotected market when trading. This will include the option to post passively on an unprotected market at the same price or better than what is posted on a protected market.

Operationally, most trading systems consolidate all market data to determine the size available at a price, and these feeds now give a false impression of how many shares will be captured by entering an order. These feeds may prove unsatisfactory in their current form as a way to prove best execution.

The Regulators' Role

It is the role of regulators to ensure their rules are followed and enforced. To effectively perform that function, clear rules and guidance must be in place, but it is also instructive to look back and assess the effectiveness of existing policies and procedures. As Canada looks to revise its best execution rules, it can learn from and build on the lessons learned in other jurisdictions and reflect on the effectiveness of its own guidance.

Although other jurisdictions are in the process of revising their rules, best execution rules generally remain principles-based. Guidance is given on the factors that must be considered, but it is up to firms and asset managers to prove they are providing and receiving best execution. Policies and procedures are required in Europe the UK and the U.S. but there is no prescriptive guidance given on the content of a best execution policy.

There are, however, increased expectations for monitoring best execution. The FCA thematic review revealed that generally firms lacked sufficient monitoring to support the delivery of best execution, and although most firms could produce some form of trade cost analysis (TCA), they are not often asked to provide it. The content of the analysis for best execution also varied widely across firms.

The FCA expects the ownership of best execution monitoring to reside with the front office. Additionally, a "second line of defense" should be established and be adequately equipped to challenge the conclusions reached by the execution desks, thereby mitigating the potential for conflicts of interest that may result from front-office staff providing the only point of scrutiny of their own performance.

Comparison of Best Execution Monitoring across Jurisdictions

	Canada	Europe (MiFID)	UK (FCA)	US FINRA
Monitoring Best Execution	Policies and procedures must be 'regularly and rigorously reviewed' and information from all marketplaces should be considered to meet best execution obligations. Currently rules are not prescriptive on how executions should be monitored.	Firms must monitor the effectiveness of their order execution arrangements and execution policy to identify and correct any deficiencies. This will involve an assessment, on a regular basis, of whether the execution venues provide for the best possible result; under MiFID II, this assessment must take into account the best execution factors as well as the information published in respect of the firm's top five execution venues.	The FCA has previously found that most firms lack effective monitoring capability to identify best execution failures or poor client outcomes, and has stated that monitoring should cover all relevant asset classes, reflect all of the execution factors which firms are required to assess, and include adequate samples of transactions. It should be clear how monitoring is captured in management information, and firms should not rely on clients monitoring their own execution quality.	In conducting its regular and rigorous review, firms must determine whether any material differences in execution quality exist among the markets trading the security and, if so, modify the member's routing arrangements or justify why it is not modifying its routing arrangements. In reviewing execution quality it should account for execution factors. ³⁷

Regulatory Onus

Best execution is not just an industry obligation; regulators must ensure they are providing adequate supervision and a consistent assessment program. In May 2013, The European Securities and Markets Authority (ESMA) mandated a peer review of competent authorities (CA) in regards to the supervision and enforcement of MiFID provisions on best execution. The review provided a first assessment on whether the intended increase in competition as envisaged by MiFID in order to benefit retail investors was implemented and enforced by the national regulators under the best execution obligations.

The review concluded that further work on the implementation, supervision and enforcement of the **best execution** requirements, as well as how to deliver the **best** service for investors, is necessary. It recommended that CA take the following actions:

- Provide guidance on best execution provisions to ensure a common understanding on the scope and obligations;
- Assess the adequacy of internal resources devoted by the CAs to the supervision of best execution;
- Assess the effectiveness of best execution monitoring; a proactive approach to supervision is recommended which may include a combination of desk based and onsite reviews and using IT systems to improve monitoring;

³⁷ Factors include: the character of the market for the security (e.g. price, volatility, relative liquidity and pressure on available communications), the size of the transaction, the number of markets checked, accessibility of the quotation and the terms and conditions of the order which result in the transaction.

- Implement clear criteria for assessment of compliance to the rules and in order to demonstrate how the risks are assessed and prioritized;
- Develop consumer education programs;
- Assess whether specific obstacles exist to the development of alternative education programs and
- Evaluate the consistent use of proportionate sanctions (with sufficiently high financial penalties) to ensure a credible deterrent effect against future breaches.

Considerations for a Best Execution Framework

The following provides considerations for developing a best execution policy in light of Canada's regulatory framework and market structure. The guidelines should not be considered prescriptive, but are instead intended to act as guidance for areas of consideration.

1) Evaluate your firm's needs and develop a suitable best execution policy

A best execution strategy must be appropriate to the business and clients being serviced. The order types used to execute small retail orders will be different from the order types used for a long-only fund; similarly the sophistication of routing infrastructure and tools used to support the order flow will vary depending on the size of the firm.

When developing a best execution policy, a firm should understand their order flow, internal infrastructure and access to marketplaces, and develop and tailor procedures to their own circumstance. UMIR addresses specific policies and procedures in regards to best execution and requires among other things that the policies and procedures must:³⁸

- Outline a process designed to achieve best execution
- Require the participant to follow the client's instructions and to consider the investment objectives of the client
- Include a process for taking into account order and trade information from all appropriate marketplaces and foreign organized regulated markets
- Describe how the participant evaluates whether best execution was achieved.

As noted earlier, UMIR also provides four general factors to be considered for best execution, and also requires Participants to take into account prevailing market conditions and factors such as the size of the spread and liquidity of the security.³⁹ The four general factors are:

³⁸ Rule 7.1 of UMIR. Proposed Rule 3300 provides greater details on what is required.

³⁹ UMIR, Policy 5.1. Other factors include: prices and volumes of the last sale and previous trades, direction of the market for the security, posted size on the bid and offer.

- Price at which the trade would occur
- Speed of execution
- Certainty of execution
- Overall cost of execution

The IIROC survey revealed some gaps in how firms route orders to marketplaces; they included:

- A relatively low ability for Participants to adjust SOR settings
 - A significant percentage of participants that use SORs do not route to dark market places
- IIROC's proposed new rules introduce new factors that need to be considered in respect to the execution of orders for listed securities to address these gaps

2) Consider the following when developing a best execution policy

- Whether best execution practices enables access all appropriate market places
- If there is appropriate access to unprotected markets and foreign organized regulated markets
- The criteria used to determine routing strategies within the context of their obligation to satisfy best execution
- The ease of adjusting SOR strategies
- Access to market data and FX rates
- Any market structure impacts
- If best execution policy reflects daily execution practices for listed and OTC securities
- If documented processes are in place on how to best achieve and evaluate best execution
- Whether internal controls and monitoring are sufficient
- Implementation of controls to manage conflicts of interest
- Whether a process is in place to support the pricing and execution of over-the counter securities
- Policies and procedures to comply with IIROC's new disclosure requirements⁴⁰
- Whether any conflicts of interest exist in relation to the best execution policy and practices.

Once a policy and procedure has been established, a process for periodic review should be put in place. IIROC's proposed new rules prescribe that a Dealer Member reviews its policies and procedures after any material market structure change, and at a minimum once a year.

⁴⁰ Proposed Provisions Respecting Best Execution – Rule 3300 Best Execution of Client Orders, 10Dec2015

3) Establish Effective Best Execution Governance

Regulation in Canada requires that policies and procedures clearly describe how the market participant determines that best execution has been achieved, and these policies should be 'regularly and rigorously' reviewed.⁴¹ From a risk mitigation perspective, it is best practice that policies and procedures are reviewed by a second line defense function such as compliance, or through an internal working group tasked with the role of monitoring best execution.

The IIROC survey showed that approximately 25% of the participants surveyed used a working group to determine their best execution approach.⁴² In developing governance structure firms should consider the following:

- Establish a working group or internal committee to oversee best execution or determine who will conduct the review
- Develop a clear mandate for the working group or internal committee that is well documented. The mandate should outline accountability and structure to monitor and enhance best execution performance. It should outline the information sources used and describe the types of events that would trigger a review
- Meet regularly; the working group should meet on a regular basis and on an ad hoc basis if circumstances warrant
- Ensure detailed records of meetings are kept⁴³
- Train employees on the application of best execution policies and procedures⁴⁴

When developing a best execution policy, a firm should understand their order flow, internal infrastructure and access to market places, and develop and tailor procedures to their own circumstance.

⁴¹ N1 23-101 Trading Rules

⁴² Of the 95% reported as having a process to comply with best execution, 27% used an order handling or working group committee to determine best execution approach

⁴³ Proposed Provisions Respecting Best Execution – Rule 3300 Best Execution of Client Orders, 10Dec2015, requires detailed records of any material decisions or changes to policies and procedures to be kept for five years.

⁴⁴ Proposed Provisions Respecting Best Execution – Rule 3300 Best Execution of Client Orders, 10Dec2015 will require dealer members to train staff on the application of the obligation

Other Best Practice Considerations

- Reporting: Generate internal reports and regularly assess the quality of execution
- Disclosure: Report disclosures on execution quality to clients on a regular basis
- Technology: Consider how technology can be used to support best execution processes
- Conflicts of Interest: Manage potential conflicts of interest

Regulation in Canada requires that policies and procedures clearly describe how the market participant determines that best execution has been achieved, and these policies should be 'regularly and rigorously' reviewed.

Conclusion

Industry participants and regulators seem to agree that best execution is a fundamental principle to ensure beneficial outcomes for clients; however due to increasingly automated markets, best execution has become more difficult to apply in practice. Regulators around the world recognize the complexities of today's markets, and have up-dated policies to reiterate the core principles of the best execution obligation, and have introduced new obligations and associated guidance on compliance.

Canada's regulators have recently published amendments to best execution rules. The rules remain principle based, but introduce enhanced governance and policy requirements to meet the best execution obligation. The new rules also propose increased disclosure of order routing and market data information.

Principles based regulation will require brokers to exercise sound judgment, maintain policies and procedures, and apply an appropriate governance structure to ensure best execution is achieved. They will need to tailor their policies and procedures to fit their business model and ensure they are fulsome and regularly reviewed.

The Canadian market may have reached a tipping point for a market its size but regardless of the resulting market complexity, the obligation to satisfy best execution persists.

Principle-based regulation will require brokers to exercise sound judgment, maintain policies and procedures, and apply an appropriate governance structure to ensure best execution is achieved.

About the Author

Donna is a highly experienced product development and business professional with a proven track record managing complex capital market industry initiatives, often with multiple stakeholders, regulatory challenges and time to market constraints. She is well known for managing products during times of significant market change such as the introduction of electronic trading or market structure reforms such as MiFID. Donna's project work includes leading TD Securities Global Fixed Income E-commerce Solutions, Chi-east, Markit BOAT, the OTC equity trade repository built in response to the regulatory changes introduced by MiFID and Markit MSA, an independent market share analysis tool for the EMEA cash equity and ETF markets. Donna now leverages her extensive capital markets experience to provide practical advice and consulting services to market participants, regulators and exchanges.

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IRESS is a principal supplier of wealth management, mortgage and financial markets systems in Canada, Australia, Asia, New Zealand, South Africa and the United Kingdom. All product streams support a diverse range of roles and offer front, middle and back-office functionality for clients that range from financial service institutions through to independent operators.

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