A FRAMEWORK FOR RESPONSIVE MARKET REGULATION

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EXECUTIVE SUMMARY

The pace of change in the capital markets is rapid and growing ever faster. The challenge for a regulator to keep up with, much less anticipate, changes in market structure and practice is intense.

A regulator's *raison d'être* is not simply to monitor for compliance and respond to significant market issues but to understand the changes and business drivers in the marketplace and to have the courage to foster a responsive regulatory climate that allows innovation to occur while ensuring that core principles such as investor protection are preserved and that the impact of any change is monitored.

Policy analysis must be both reactive and anticipatory. Most new market structure developments and practices come from marketplaces, dealers, industry participants and clients, and regulators must ensure that these changes are consistent with the underlying regulatory principles. Other times, the regulator must anticipate changes in the markets driven by developments in other jurisdictions or by the introduction of new products.

In Canada, market regulators have taken steps to be informed and responsive to market innovation. Policy analysis has been both reactive and anticipatory and policy decisions have been introduced after clear consultation and detailed review of the market data.

Policy decisions must be regularly revisited to identify if there have been unintended consequences or market developments that necessitate a review because they were not anticipated at the time the rule or policy was made.

Policy formulation must be driven by a clear vision and set of underlying market goals including:

1. *Implementing a vision of the ideal market structure*: What values or attributes, such as integrity, transparency and fair and open competition should be maximized?

2. *Identifying and addressing issues and opportunities:* What is standing in the way of the vision? What is on the horizon that may have a negative impact?

3. *Fostering innovation:* Does the existing regulatory framework accommodate innovation and developments in the market, or must changes be made?

4. *Reexamining past decisions and their outcomes:* Did previous rule and policy decisions achieve the intended outcome? Are there unintended consequences? Is the issue that was addressed by the rule still a concern, or is the rule outdated? Are changes required?

These drivers are discussed in this paper in the context of concrete policy initiatives that were undertaken by securities regulators in Canada. The paper describes how Canadian

regulators' approach to developing regulatory policy to promote competition among trading venues, address inefficiencies in existing rules (order protection or trade-through), and to recognize and address new developments that raised potential concerns (dark trading) and innovation (high-frequency trading and order processing delays). It also identifies examples where regulators revisited past decisions and made necessary changes.

I. Introduction

The pace of change in the capital markets is rapid and growing ever faster. Just 30 years ago, most trades in securities were undertaken the way they had been done 100 years earlier: through interactions with an advisor, paper order tickets created and timestamped, and culminating in face-to-face negotiations on the floor of an exchange. Today, trading floors are a relic of a bygone age and computers make trading decisions as they buy and sell with other computers. The challenge for a regulator to keep up with, much less anticipate, changes in market structure and practice is intense. However, doing just that is key to the regulator's purpose. Failing to look forward leaves regulators with two unappealing choices. The first would be to preserve the regulatory status quo and ban any new practice or entity that does not fit neatly into the existing framework. The second would be to decide that regulating new entrants is too difficult, which would allow an unregulated sector to operate, flourish and perhaps begin to supplant the existing markets.

This paper submits that a regulator's *raison d'être* is not simply to respond to market issues but to understand the changes and business decisions in the market and to have the courage to foster a responsive regulatory climate that allows innovation to occur while ensuring that core principles, such as investor protection, are preserved and that the impact of any change is monitored.

This paper identifies drivers for responsible policy development, and will cite examples of market structure issues and policy development where the Ontario Securities Commission (OSC) has used them as a basis for responsible decision making.

II. Approach to developing and implementing a regulatory framework

The work of a regulator must always be grounded in first principles. In the case of the OSC, these are set out in our governing legislation:

> The purposes of [the *Securities Act*] are,
> (a) to provide protection to investors from unfair, improper or fraudulent practices; and
> (b) to foster fair and efficient capital markets and confidence in capital markets.[1]

The first purpose, investor protection, lends itself to direct regulatory actions: prohibiting or regulating certain conduct, requiring certain disclosures and taking enforcement action against fraudsters. The second is indirect. The OSC does not operate the capital markets, and while we may create an environment where fair and efficient capital markets may develop, we cannot require anyone to use them. Developing fair and efficient markets requires setting standards, but also requires regulators to recognize when regulatory action is not needed or may be counterproductive and when existing rules have served their purpose or have unintended consequences.

In Canada, market regulators have taken steps to be informed and responsive to market innovation. Policy analysis is both reactive and anticipatory. Most new market structure

[1] *Securities Act*, s. 1.1, R.S.O. 1990 c. S.5 as am S.O 1994, c.33, s.2 (Securities Act).

developments and practices come from marketplaces, dealers and market participants, and regulators ensure that developments and practices are consistent with the principles underlying the regulatory framework. Other times, we have anticipated changes in the market. The changes may arise due to developments in other jurisdictions or may be driven by the need to accommodate innovation.

Policy decisions must be regularly revisited to identify if there have been unintended consequences or market developments that necessitate a review because they were not anticipated at the time the rule or policy was made.

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2. *Identifying and addressing issues and opportunities:* What is standing in the way of the vision? What is on the horizon that may have a negative impact?

3. *Fostering innovation:* Does the existing regulatory framework accommodate innovation and developments in the market, or must changes be made?

4. *Reexamining past decisions and their outcomes:* Did previous rule and policy decisions achieve the intended outcome? Are there unintended consequences? Is the issue that was addressed by the rule still a concern, or is the rule outdated? Are changes required?

These drivers are discussed in this paper in the context of concrete policy initiatives that were undertaken by securities regulators in Canada. The paper describes how Canadian regulators' approach to developing regulatory policy to promote competition among trading venues, address inefficiencies in existing rules (order protection or trade-through), and to recognize and address new developments that raised potential concerns (dark trading) and innovation (high-frequency trading and order processing delays). It also identifies examples where regulators revisited past decisions and made necessary changes.

1. The vision of an ideal market

In 1999, trading in Canada was realigned so that all senior issuers were trading on the Toronto Stock Exchange (TSX), all junior issuers on the Canadian Venture Exchange and all equity options and financial derivatives on the Montreal Exchange.[2] The Canadian Securities Administrators (CSA),[3] led by the OSC, undertook a review of market structure with a view to

[2] Both the Canadian Venture Exchange and the Montreal Exchange were subsequently acquired by the Toronto Stock Exchange. The Canadian Venture Exchange was rebranded the TSX Venture Exchange.
[3] The umbrella organization through which the Canadian provincial and territorial securities regulators co-ordinate and harmonize regulation of Canadian capital markets.

creating a competitive framework where new types of marketplaces could operate. This review was taken in light of a worldwide trend of not-for-profit mutual exchanges demutualizing, becoming for-profit share corporations, and the issues that arise with a for-profit company having a virtual monopoly on trading. The CSA was also mindful of developments in the United States with respect to regulating new trading venues.[4]

A broad public policy discussion on the vision of fair and efficient markets and the opportunities and issues created by new marketplaces followed. The opportunities included increased competition, resulting potentially in lower costs and new trading methodologies more responsive to investor needs. The issues related to the fragmentation of information, trading and regulation,[5] more complexity, and a risk of a regulatory "race to the bottom" where marketplaces lowered market integrity standards to compete for order flow.

To effectively engage in the policy discussion, the TSX created a Special Committee on Market Fragmentation which in 1997 issued a report entitled *Market Fragmentation: Responding to the Challenge*. The report set out the attributes of an ideal market in the context of market fragmentation, including:

- *Maximizing market integrity*, which is measured by the confidence that investors and the general public have in the capital markets. It is a perception that a marketplace operates fairly without fraudulent or unethical practices. If the public perceives that trading in a market is open to abusive or unfair practices, confidence will quickly be lost and they will be reluctant to invest.

- *Ensuring fairness*, which is a market in which all participants operate under essentially the same rules and no participant or group of participants has advantages over the others in terms of access, priority of execution or receipt of market information.

- *Maximizing liquidity*, which is measured by the ability to execute a customer order at a price that is at, or near, the last sale price for that security. The greater the number of orders and volume of shares that can trade with little or no change in market price, the greater the liquidity.

[4] In the United States, Regulation ATS created a framework for the regulation of alternative trading systems.
[5] In a centralized market, a security trades only on one trading venue and all buying and selling interest is concentrated on that venue. There is no competition among marketplaces, but there is competition among orders. However, because the marketplace has a monopoly on trading, it does not have strong incentives to keep costs down (resulting in higher fees), nor does it have incentives to innovate. This concern is exacerbated if the marketplace operates on a for-profit basis.
In a fragmented market, securities are traded on multiple venues, and buy and sell orders may be sent to any of those venues. This adds complexity as a person entering an order (either as principal or agent) must make a decision where to route an order, and needs access to information on market activity and prices to make an informed decision as to where the order is most likely to obtain best execution. The trader must also have access to that marketplace. However, because there is competition, marketplaces have a strong incentive to keep costs and fees as low as possible and to innovate.

- *Maximizing real-time transparency of orders and trades*, which can be measured by the degree to which customer orders are entered into a central order book rather than withheld outside the system and details of completed trades are disseminated.

- *Maximizing price discovery*, which is the ability to price a security to reflect the value that well-informed investors would place on the security at the time of the trade. This is dependent on liquidity, immediacy and visibility. Price discovery is efficient if it minimizes the time and effort needed for buyers and sellers to agree on a price. It is effective if the price accurately reflects the fundamental value of a security.[6]

The Special Committee recognized that it is impossible to fully maximize all of these attributes at the same time as they may conflict with market participants' needs and preferences. For example, an investor's wish not to disclose a trading intention because of potential negative market impact conflicts with the ideal of transparency. Similarly, a market participant may decide to forego full price discovery in order to complete a trade quickly.[7]

The CSA used the work of the Special Committee as an input to develop a vision for a competitive marketplace environment that promoted fairness, transparency, market integrity, price discovery and liquidity. This framework was developed to support the benefits of competition while minimizing the issues arising from fragmentation. The rules and policies creating this framework (Marketplace Rules) were implemented in 2001,[8] and, as noted below, have been revisited and amended several times since. The framework established a new type of marketplace, distinct from traditional exchanges and called an alternative trading system (ATS), and set out core principles required for all marketplaces (exchanges and ATSs), including:

- *A common set of rules:* All entities carrying on business as a "marketplace" trading securities would be subject to the Marketplace Rules, with similar requirements applying, but with differentiation between exchanges and ATSs where appropriate.[9] These requirements were based on the ideal market framework.

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[6] Additional attributes listed by the Special Committee were:
Maximizing immediacy, which is the ability to execute an order at a reasonably acceptable price in a reasonable period of time. It is tied to liquidity, as it will take less time to complete a trade as liquidity increases.
Minimizing transaction costs, which are the costs of implementing an investor's trading strategy. These costs include brokerage commissions/dealer mark-ups, transaction and trading fees and market impact costs (the difference between the price an order is executed at and the market price before the trade was made).
Ensuring the integrity of the credit ring by providing certainty that trades will be settled promptly on the terms agreed, minimizing the risk that a counterparty will not be able to complete a trade.

[7] Toronto Stock Exchange Special Committee, *Market Fragmentation: Responding to the Challenge*, 17-27 (1997). *See also*, Eric Kirzner, *Ideal Attributes of a Marketplace*, research study commissioned by the Task Force to Modernize Securities Legislation in Canada (2006) at http://www.tfmsl.ca/docs/V4(2)%20Kirzner.pdf

[8] National Instrument 21-101 *Marketplace Operation* (NI 21-101) and National Instrument 23-101 *Trading Rules* (NI 23-101).

[9] Unlike the United States, the requirements for exchanges and ATSs are largely harmonized. In addition to complying with the Marketplace Rules, ATSs must be registered as an investment dealer and be a member of the Investment Industry Regulatory Organization of Canada (IIROC).

- *Oversight:* All marketplaces are subject to full commission oversight.[10] Applications for recognition (exchange) or registration (ATS) include a comprehensive form describing its business operations. Significant changes to their operations, rules, and fees require approval and are generally subject to public notice and comment prior to implementation. The comment and approval process ensures that marketplaces operate within the established framework and the impact of a marketplace's operations on the broader capital markets is considered vis-à-vis the purposes of the *Securities Act* and the vision of competitive markets.

- *Fair access to products and services:* Marketplaces may not unreasonably condition or limit access to their products and services, including by imposing fees. This ensures that marketplaces operate in a manner that is fair and that no participant has an advantage over any other.

- *Market integrity rules*: Exchange rules must ensure compliance with securities legislation, prevent fraudulent and manipulative acts and practices and promote just and equitable principles of trade. ATSs, which cannot regulate the conduct of their participants, are required to use a regulation services provider (RSP), which is a self-regulatory organization (SRO) that has its own set of similar "universal market integrity rules" (UMIR) covering participants that trade on the ATS.[11] This ensures market integrity and fairness.

- *Management of conflicts of interest*: Marketplaces must maintain policies and procedures to identify and manage conflicts of interest. This promotes market integrity and fairness.

- *Order and trade transparency*: Marketplaces must display details of orders and trades in real time unless it is a dark pool that does not display pre-trade order information to any participants.[12] This information must be reported to an information processor, which provides a consolidated market data feed. Marketplaces can also sell their own market data, subject to compliance with the fair access rule. This maximizes transparency and price discovery.

- *System integrity*: Marketplaces must have internal controls over critical systems, make reasonable capacity estimates, perform stress tests and have an independent systems review conducted annually. Marketplaces must also have robust business continuity and disaster recovery plans. This is an important element of market integrity.

These rules underpin and promote the CSA's vision of ideal market attributes that promote price discovery, transparency and liquidity by providing for the availability of trading

[10] Due to the provincial nature of securities regulation in Canada, oversight responsibilities for particular marketplaces is divided among securities commissions in Alberta, British Columbia, Manitoba, Ontario and Quebec. The CSA has a memorandum of oversight for exchanges, where each exchange is recognized by one or more lead regulators and exempted from recognition in the other jurisdictions.
[11] IIROC is the only RSP. Exchanges may, but are not required to, use an RSP. All of the equity exchanges in Canada use IIROC as their RSP.
[12] Dark pools must provide the same post-trade transparency as lit markets.

information and fair access to all liquidity pools. They promote fairness and market integrity through compliance with a uniform set of trading rules (in National Instruments and UMIR) that apply to all participants and marketplaces. Finally, they set a framework for fair and open competition among marketplaces.

The rules were successful in promoting competition. Since they were enacted, three new exchanges and 13 ATSs[13] have commenced operations in Ontario, Canada.

In addition to having a vision of the attributes of an ideal market, a regulator must also be aware of developments in the market that may impede the vision or, if left unchecked, may negatively impact capital markets or provide lower standards of investor protection. These may include developments that would be benign or even beneficial if tailored to a segment of the capital markets, but that could become problematic if they are widespread. The OSC has led policy initiatives on a number of fronts that were intended to regulate market practices before they became market problems. These initiatives, some of which are described below, were initiated and analyzed through the lens of the attributes of the ideal market.

(a) Order protection

Price or order protection (or the paramountcy of price priority) promotes the attributes of market integrity and fairness through policy and addresses inefficiencies. It exists in a competitive, multiple marketplace environment where a security is trading on many venues.

Price protection is a regime that ensures that the best-priced orders across multiple marketplaces are executed first. In Canada, these rules long existed in exchange trading rules, as many securities were interlisted on multiple exchanges.[14] They were initially designed as an absolute prohibition. Later, they were included in UMIR and protected better-priced orders on all Canadian marketplaces. This approach of an absolute prohibition proved problematic in a fast-moving, multiple marketplace environment where a trade through might result from a change in the market that occurred between the time an order was entered and the time it arrived at a trading engine.

The complexity of the evolving market in Canada necessitated that price protection be adopted so that price discovery, liquidity, immediacy and market integrity were maintained. The CSA enacted an order protection rule (OPR) as a policies and procedures obligation on a marketplace (or on a dealer if the dealer agreed to assume compliance responsibilities) to take steps to avoid trade throughs. The regulatory regime includes exceptions to allow for market conditions. The implementation of OPR fostered the vision of competition and investor confidence, but, as described below, we realized that it had unintended consequences.

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[13] 2 ATSs have subsequently ceased operations.

[14] As noted earlier, trading in senior equities was concentrated on the TSX. However, many securities were also listed on US exchanges and, until 1999, on other Canadian exchanges. The trade through rule was originally enacted to address a concern that members would trade on another, less liquid exchange to avoid having to displace better-priced bids or offers on the TSX. Because the other marketplaces were less liquid and usually had wider spreads, the trade could be reported to the marketplace as a cross, without any competing orders at that price to interfere with the trade. The Montreal Exchange, which traded equities at the time, had a similar rule.

(b) Dark markets

In Canada, the framework of the Marketplace Rules permitted "dark trading". In certain circumstances, marketplaces could offer trading without pre-trade transparency. However, as dark trading developed, regulators began to consider the risk to price discovery should the volume of dark trading increase. We decided to be proactive and develop a framework to ensure that we could foster trading in the dark in particular circumstances where it was appropriate, but still maintain the principles of price discovery and transparency and ensure that market quality would not be negatively impacted by the loss of trading and order visibility in the lit market.

Our objective in undertaking a review of dark liquidity was to balance the risk that larger institutional orders could suffer adverse market impact if details were disclosed prior to execution with the need to establish limits on orders that were not transparent. These limits were needed because of the risk to the ideal market if smaller orders were removed from the visible market, were not transparent and did not contribute to price discovery.

The CSA created a regulatory framework for dark markets that allows IIROC as regulation services provider to establish the minimum size for orders to be entered into a dark pool. In addition, as part of this framework, IIROC's UMIR were changed to require meaningful (generally 1 cent) price improvement for smaller, retail-sized orders entered in dark pools.[15] By setting these limits, the CSA and IIROC were able to proactively regulate the expansion of dark liquidity with the necessary limits, while providing flexibility.

2. Accommodating innovation

Markets are continually evolving. The previous section discussed situations where a regulator must be vigilant to identify risks to achieving the regulatory vision and manage new practices to ensure they do not harm the capital markets. At the same time, regulators must be careful not to stifle new developments that do not fit neatly into the regulatory framework but that may be beneficial to the markets. The OSC has taken steps on numerous occasions to allow innovation while preserving its vision.

(a) High-frequency trading

Fully electronic trading in Canada dates from 1977, when the TSX introduced the Computer Assisted Trading System (CATS), the world's first fully-electronic trading system. However, because it was used to trade less-liquid securities and order entry was manual, the risks it posed to the market as a whole were minimal and manageable. Later came the development of algorithmic trading, where buy and sell decisions are made by computers using pre-programmed algorithms. Increased reliance on technology by marketplaces and dealer firms has introduced new risks to the market. These include the possibility of greater volatility or errors causing sudden price movements.

[15] UMIR Rule 6.6 *Provision of Price Improvement by a Dark Order*.

The increased use of electronic trading has led to the entry of new participants such as "high-frequency" traders (HFTs), who rely heavily on technology to access marketplaces. HFTs have become significant players in the markets, have changed the nature of trading and have had an impact on traditional, largely manual, market makers. Along with the risks described above, concerns emerged about a level playing field within and between markets and whether those with better technology were unfairly trading ahead of others.

In undertaking the policy analysis of whether to regulate HFTs, the OSC focussed on identifying the key risks they brought to the market. Existing prohibitions on manipulation and trading rules applied to their trading. Consequently, the analysis of risks focussed on the use of technology, such as the risk that systems were not properly tested, that errors would be introduced to the markets and that improperly programmed or rogue algorithms would cause disruption in the marketplaces. This analysis suggested that the best approach was not to regulate the HFTs directly (i.e., requiring them to be registered as dealers and subject to a body of rules) but to directly address the technological risks their trading raised.

As a result, in 2012, the CSA adopted a regulatory framework for electronic trading and direct electronic access to marketplaces by clients, including HFTs.[16] Under ETR, dealers are required to establish, maintain and ensure compliance with risk management and supervisory controls, policies and procedures that are reasonably designed to manage the financial, regulatory and other risks associated with marketplace access or providing clients with access to a marketplace. These controls must include automated pre-trade controls and post-trade monitoring. Before giving a client direct[17] electronic access (DEA), dealers must ensure that giving such access is in compliance with the dealer's policies and procedures. In addition, both dealers and their DEA clients must ensure that their automated systems will not interfere with fair and orderly markets.

Marketplaces must have the ability to cut off access in the event an automated system is causing disorderly trading, and must not allow execution of orders that exceed thresholds established by IIROC. This framework imposes accountability on dealers, marketplaces and DEA clients to ensure that when relying on technology to trade, the risks to fair and efficient markets are properly mitigated.

The decision to introduce rules managing the technological risk focussed on the actual risks these new participants brought to the markets and recognized the role of HFTs in a changing market environment and the need for dealers that provide them with access to have accountability with respect to ensuring the operation of fair and efficient markets.

(b) Speed bumps

Another innovation in Canada is the introduction of order processing delays (speed bumps) by two exchanges, Aequitas NEO Exchange and Alpha Exchange. Unlike the IEX Exchange in the United States, which imposes a delay on all orders, the Canadian equivalents

[16] National Instrument 23-103 *Electronic Trading and Direct Electronic Access to Marketplaces* (ETR).
[17] Access is direct in the sense that orders entered by the client are not reviewed by the dealer prior to entry on a marketplace unless they exceed parameters established between the dealer and the client.

impose targeted speed bumps. In the case of Aequitas, active orders of "latency-sensitive traders" are subject to a random delay before entering the system. In the case of Alpha, all orders other than post-only orders (orders that are passive only) of a minimum size are subject to a random delay.

The introduction of these speed bumps raised a number of regulatory concerns, the biggest being related to quote fade. Liquidity providers who were not subject to a speed bump could cancel or reprice their orders in reaction to activity on other marketplaces before an order that was in the speed bump was released.

In Ontario, the Commission considered the innovative aspects and allowed them to go forward. In approving the Alpha speed bump, it imposed a condition that orders on Alpha not be protected under OPR.[18] In addition, Alpha was required to provide the Commission with analyses of the impact of the speed bump, and the Commission confirmed that it could revisit its approval if there is evidence of a negative impact on the quality of the capital markets.

In allowing Aequitas and Alpha to implement speed bumps, the Commission recognized the need to foster innovation, but recognized that there may be risks that speed bumps could negatively impact fair and efficient markets. If that happens, an appropriate regulatory response should be taken.

3. Looking back

Part of responsible policy analysis is that it is not sufficient to just put requirements in place. Rules and policies must be continually reexamined and assessed to ensure that they continue to achieve their objectives. This review should examine new developments in the market, identify gaps and address unintended consequences. A regulator must have the courage to admit that a particular rule did not get it right the first time. These are a few examples where Canadian regulations adjusted and amended rules to ensure the right outcomes were achieved efficiently and effectively.

(a) Marketplace Rules

In Canada, the Marketplace Rules have been updated several times to address changing market practices. In some instances, rules were strengthened, such as aligning the rules for ATSs more closely with the rules for exchanges and mandating business continuity and disaster recovery planning. In others, they were streamlined to ensure that the regulators receive the information that we need to conduct effective oversight, but not impose a heavy regulatory burden. These rules must be evergreen, to ensure that they support the vision of the regulators and reflect existing market reality.

[18] This meant that dealers would not be required to send an order to Alpha and be subjected to the speed bump, even if Alpha had a better price. Later, OPR was amended so that marketplaces imposing a speed bump would generally not be protected.

(b) OPR

In another example, OPR, which was described above, was revisited because its implementation led to unintended consequences and inefficiencies in the market. The intent of OPR was to foster liquidity, immediacy and price discovery by limiting trade throughs. Even though it was designed as a policies and procedures rule, most dealers interpreted the rule as a requirement to connect to every lit marketplace and to use all lit marketplace pre-trade data for order routing purposes. Dealers complained that they were captive consumers, and that marketplaces, particularly smaller ones, were taking advantage of this by imposing market data fees that were high compared to the marketplace's contribution to overall liquidity and price discovery.

The OSC led a CSA initiative to review the rule to address the inefficiencies and costs, with the goal of maintaining the initial policy rationale behind the rule (i.e. investor confidence, price priority). As a result of the review, the rule was amended to require a marketplace to have at least a 2.5% market share in order to be protected. The impact of this change was to maintain price priority in the majority of the market, while providing participants with flexibility to choose to trade on markets that are innovative and offer products and services that they want to use.

III. Conclusion

In fast-changing capital markets, regulators need the courage to be responsive and forward-thinking, while at the same time, monitoring past decisions to ensure that the outcomes are as intended.

A regulator needs to have a vision of an ideal market, and must be able to articulate the principles that underlie this ideal market. The regulator also needs to understand what is driving change in the market, and examine it using those principles as a touchstone, and evidence to justify regulatory action (or inaction). Regulators can't be afraid of change, and should allow innovation unless there is clear evidence that it will have a negative impact on market integrity and market quality. In doing so, innovative practices need to be monitored to ensure there is not a negative impact, and the regulator must react quickly if there is. Regulators also need to re-examine previous decisions and address any gaps, new developments in the market, and unintended consequences. In other words, regulation must always be dynamic and forward-thinking, but also retrospective.