

"The Road from Data to Knowledge:

The Challenge for Regulators"

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Check against delivery

Good morning.

I am delighted to have this opportunity to speak to all of you who have gathered here to discuss top-of-mind compliance and analytical issues.

I want to thank NASDAQ O-M-X for inviting me to participate in this conference as the new Executive Director of the Ontario Securities Commission, the largest provincial securities regulator in Canada.

As some of you know, I joined the OSC earlier this year from the Investment Industry Regulatory Organization of Canada, or IIROC, where I was Senior Vice President of Surveillance and Compliance. IIROC is the national self-regulatory organization that oversees all investment dealers and trading activity on Canada's debt and equity marketplaces.

While at IIROC, I drove the adoption of an enhanced surveillance system for equity trading, which uses SMARTS technology.

The OSC recognizes IIROC as an SRO in Ontario and is responsible for its oversight and so I am delighted to maintain my involvement with SMARTS from afar!

Today I'm speaking from the point-of-view of a securities regulator whose perspectives are strongly informed by SRO experience in surveillance and compliance.

Our business – financial services regulation – is going through a revolution.

This revolution is forcing securities regulators, the securities industry and all players in the financial markets to evolve quickly. The challenge now is for all of us to dramatically change what we do while still remaining focused on our core business.

Quite simply, we have to do things differently.

I believe, as regulators, we have to begin to think differently and we have to interact differently to keep up with the change.

We must change how we use data – we have to turn data into knowledge.

We need to more effectively track:

- Who is doing what in the markets, and when;
- Trends and patterns in market activity;
- The behaviour of clients and customers; and
- What new products are being developed.

I want to talk to you about what I believe are three "must haves" for statutory regulators to deliver "smart" regulation:

1. A broader focus and mandate to address gaps in regulation;

2. A deeper understanding of emerging trends and behaviours in the market; and

3. Better tools, better processes and better access to data to follow and respond to those trends.

1. Broader Focus for Regulators

First, let's discuss the need for a broader focus and mandate for statutory regulators.

A wider focus is especially applicable now because of the international regulatory effort to address systemic risks to the financial system in the wake of the credit crisis.

Central banks, prudential regulators and securities regulators – including the OSC – are working to support a more stable financial system in conjunction with commitments by the G20 nations.

The OSC and other securities regulators are now participating in macro-prudential efforts to promote a system-wide approach to financial regulation and to work with other authorities to develop the tools to address systemic risk. This is a new role for us. The public expects all markets to be supervised and regulated, particularly Over-The-Counter markets, including (OTC) derivatives. This is one of the notable commitments Canada made to the G20.

We can't continue business as usual – when our mandate is being transformed!

In Canada, we face certain challenges in delivering more effective supervision of OTC derivatives markets:

1. First, our regulatory framework is comprised of 13 provincial and territorial securities regulators – the Canadian Securities Administrators (CSA) – so coordination with the Bank of Canada and Canada's banking regulator can be challenging.

We're dealing with this by extensive cooperation with our regulatory colleagues. We work with the other CSA members and also with the Bank of Canada and OSFI (Office of the Superintendent for Financial Institutions of Canada) through the Heads of Agencies. As you can imagine this can be challenging; however, we have already seen many examples where this cooperation has resulted in much more informed and better decision-making!

2. Second, securities regulators have limited access to trade data from many of these markets for regulatory purposes.

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Amendments to the Ontario *Securities Act* already provide for an enforcement framework for OTC derivatives markets, including the authority for the OSC to conduct surveillance, investigate and enforce against abusive practices.

The CSA has released a public consultation paper on the development of trade repositories in Canada and the oversight and use of this data by regulators. We are currently drafting rules for trade repositories that will eventually go out for public comment.

An important part of those rules will be the requirement that all OTC derivative trades involving a Canadian party must be reported to a trade repository approved by the OSC or other CSA member. Access would allow us to monitor and attempt to intercede where we see systemic risk building in a particular product, asset class, or individual counterparty or group of affiliated companies.

This would mean that the OSC would receive the market data it needs to properly monitor these markets.

The OSC challenge is then to analyze this data to better understand trends and identify issues.

2. Understanding Trends and Behaviours in the Markets

That leads me to the second "must have" for regulators – an enhanced understanding of emerging trends and behaviours in the market – including new market structures and new products.

I believe that effective regulatory policy development and oversight flow from a deep understanding of market activity. This is where leveraging market data is critical for regulators.

The first task, then, is to understand the data.

Market analysis and the review of trends in trading data is helping the OSC gain a broader view of market activity.

IIROC provides the OSC with surveillance and market data that allows for the identification of market issues to be considered in policy making, compliance and enforcement. This relationship between the SRO and statutory regulator is critical to understand the markets.

As many of you are aware, IIROC uses a customized version of the SMARTS Integrity Platform to maintain a single-window surveillance system for all 11 equity markets operating in Canada. The IIROC system – called STEP – consolidates regulatory feeds from all marketplaces and provides a centralized view of trading activity. STEP can process hundreds of millions of trade, order, quote and cancellation messages per day.

The system gives IIROC the ability to more effectively monitor equity trading on all marketplaces, in particular security, a sector or by an individual market participant.

IIROC also uses the system for event and issue studies.

A recent example in Canada is the outcome of the analysis of the Flash Crash. IIROC's review involved the reconstruction of that one day of trading across nine marketplaces involving thousands of securities and more than 230 million data points. The analysis of the causes of the sudden price declines and recoveries helped all of us to understand what really happened on May 6, 2010. This knowledge resulted in recommendations that led to policy initiatives, such as the proposed adoption of volatility controls in Canada's equity markets.

Another strength of the IIROC surveillance system is the rich equity audit trail that is collected on a real-time basis. Every order submitted to any marketplace has a long list of order attributes in addition to the security, amount, etc, including the:

- Dealer identification;
- Trader identification;
- Long or short sale;

- Insider or significant shareholder marker;
- Time of entry;
- Direct market access identification; and
- Several other markers

The value of this information is that it allows for a very good understanding of the trading in the Canadian marketplace on an ongoing basis.

This real time audit trail is augmented by a rich audit trail maintained by all firms that can be requested to understand the order handling prior to submission to a marketplace and of detailed client activities.

In addition to this there are discussions concerning the addition of a client "ID" to the real time data – however, this is still in the early stages. That would regulators to model client behaviour and spot trends across all markets and participants.

IIROC staff are definitely the equity market experts and the data and knowledge sharing between the IIROC and the OSC is of great benefit to markets in Canada.

However, it is clear to us that such depth of knowledge is also necessary for cross-market and cross-product oversight, including linking equity, debt, exchange-traded and OTC derivatives trading to adequately monitor financial market activities and to understand systemic risk. Going forward, regulators will require more information to better understand trends in the marketplace as a whole.

Consultation is another important way to enhance our understanding of trends and behaviours.

The OSC is working with IIROC on issues that would address risks associated with electronic trading, such as the adoption of risk controls by market participants and the harmonization of volatility controls by marketplaces. We address these issues in the context of our proposed new electronic trading rule.

Last year, we co-hosted a forum with the industry to discuss how to more effectively regulate Dark Pools. Our consultations played an important role in helping to develop plans to implement a comprehensive regulatory framework for dark liquidity. The CSA's proposals – including IIROC's draft rules – were released in July.

So, to stay ahead of the curve, we need the ability to identify potential new threats to market integrity and investors' interests. We need to collect data from various sources, such as from SROs, other regulators, think tanks, market participants and academics. We are endeavouring to adopt a more fact-based and analysis-driven approach to identifying issues and designing appropriate responses.

3. Better Tools and Better Processes

This now leads me to the third "must-have" for regulators: better tools to follow trends and behaviours and better processes to react to them.

The explosive growth in trading volumes created huge flows of trading data. In Canada, IIROC monitored about 350 million trades on equity marketplaces in 2010 – a 34-percent increase in volumes over the previous year. Daily message traffic averages around 160 million and continues to grow. Four years ago, daily message traffic was 10 million.

Faced with huge amounts of data flowing from the markets, regulators need to receive data in usable formats so that their review and analysis are as efficient as possible.

Data dumps won't help us spot trends.

If you want to know what's going on in the markets, then you must have access to data and expert analysis.

SMARTS technology is a good example of a tool that can help regulators better understand and oversee the markets. As regulators we need to begin to centralize the data collected and use systems to analyse this data. Most regulators and for that matter most businesses are organized into silos that look at all of "their" data separately. We have to start mining our own data, including corporate finance transactions and compliance review data, to both understand current behaviour and to allow us to follow trends.

But it's not just about tools – it's also about how we work.

We have to break down the siloed approach to information.

One of the most siloed areas in regulation is enforcement.

In Ontario, the OSC has made changes to its enforcement processes to use more information on trends to direct enforcement activity.

Our Enforcement Branch created a dedicated team to target illegal insider trading and market manipulation. This specialization allows our staff to better understand what is happening in the markets and to look at market manipulation more broadly. The use of SRO referrals and client complaints along with trend analysis now drives case selection.

We are now starting to see results from our heightened targeting of market manipulation. In the last year, we have terminated several boiler room operations and focused on market fraud. We expect to commence more enforcement proceedings in connection with market manipulation in the near future. The second point I want to make about OSC work processes concerns leveraging data through relationships.

The OSC puts a high priority on domestic and international regulatory cooperation – I've talked about our collaboration with IIROC and the CSA. Strong relationships among regulators and good information-sharing are essential to building our knowledge of the markets and cross-border misconduct.

We can then lever that knowledge to inform our policy, compliance or enforcement actions.

In conclusion, I want to stress that securities regulators have the best opportunity in years to make bold moves to go forward.

Here in the United States, the Dodd-Frank legislation is one example of pushing the regulatory envelope to address significant risks, issues and developments in our capital markets.

The credit crisis of 2008 and today's market conditions are also pushing all of us regulators to make progress:

- To broaden our focus;
- To deepen our understanding of emerging trends and behaviours; and
- To use better tools and processes to follow trends and new behaviours.

Conferences like this event and tools like SMARTS also represent the kind of resources that regulators need in the current environment.

I want to leave you with my "Top 3" list of what I think we need to do to up our game – whether you are a securities regulator or a market participant.

Understand the activities and needs of clients, customers and stakeholders.
Without this understanding of what is happening in our markets we will continue to make decisions based on a outdated view of the markets. We need to consult with others, employ experts in our businesses and encourage challenge of the accepted practices.

2. Embrace analysis.

A lot of the information that regulators use today is transactional data. The next big step forward will be in the use of analytics – the analysis of data by regulators to find trends and patterns. In today's capital markets, securities regulators need to use their transactional data and analyse that data to understand trends.

And finally...

3. We must ensure that we use evidence-based decision making.

Today, regulators must understand the challenges faced by investors and market participants. By using consultation, analysis and research, we can make policy that addresses issues and doesn't simply curtail certain types of activity.

The revolution in financial market regulation requires us:

- to think differently,
- to do things differently, and
- to interact differently.

I think that if we do this well, we will deliver "smart regulation" for our capital markets – regulation that protects investors, encourages innovation and allows for efficient markets.

Thank you.