

# Surveillance Framework

FEAS Members behavior

Palestine Exchange

Lead of Surveillance Task Force  
of  
Federation of Euro-Asian Stock Exchanges

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# Preface

*Everything is a piece of a jigsaw puzzle that is getting together day after day so we can enjoy the beauty of the picture! On March 06, 2006 my journey to the world of market surveillance began, with not a single piece inside my mind, at that time, on what this world looks like. I barely could find a piece of this mysterious world, but I had, and still have, the curiosity to discover it. This increased the motive inside me to dive deeper and eventually, pieces started to show up. I realized that I'm living the history of accounting at its early stages!*

*The early development of accounting dates back to ancient Mesopotamia and is closely related to developments in writing, counting and money and early auditing systems by the ancient Egyptians and Babylonians. Setting the fundamentals of accounting, we know nowadays started thousands of years later. As recent as the 19th century, the foundations of cross borders standards emerged as international and overseas companies became part of the business world. Surveillance profession is going on the same path as accounting. There are many kinds of literature available now to the reader, yet they are scattered over websites, professional bodies, and research centers. We need to start putting the pieces together in one document. For that reason, this paper was written. It's our contribution to the profession of surveillance. This small step not only gathers scattered pieces together but also creates some missing ones to be added to the big picture.*

*On May 2013, at FEAS spring meeting in Sarajevo, the proposal of creating a surveillance task force was introduced. The task force was created in 2014, and we started a long journey of challenges to set the basis for this book. It was called a technical Guide at that time. And after digging deeper, I believed that it could be called "Surveillance Fundamentals" with its first version.*

*The beauty of this profession is that as deeper we dive, we realize that what we thought to be a single piece is actually a set of smaller pieces which we need to break down to understand. That was challenging as it's hard to decide how deep is considered sufficient for this version.*

*This Framework reflects my philosophy to Market Surveillance along with the two-level mechanism. It was first implemented at Palestine Exchange, and every time I share it with other peers, I receive a compliment. So, I decided to share it with FEAS family and include it in this text as well. I need to mention that this work also gathers parts of priceless articles and research papers in one book. I came by those materials through my journey to follow the curiosity inside my mind. Putting those materials together in one text gives a better understanding than reading them separately. This widens the scope of this framework to set the base for the main points that every surveillance professional should be aware of.*

Mohammad A. Abu Baker

# Why Market Surveillance

The first question to a newly appointed surveillance professional should be, what is the purpose of market surveillance? The simple answer to that is - to maintain *market quality*! This raises the question about the definition of market quality. I liked the answer of Prof. Michael Aitken in which he stated that Market quality reflects dual criteria of *Market Efficiency* and *Market Integrity*. Here *Market Efficiency* refers to the degree to which stock prices and other securities prices reflect all available, relevant information, and that results in a low trading cost. *Market Integrity*, on the other hand, might be defined as the extent to which investors are engaged in prohibited trading behaviors.

It's obvious that this profession has its own terminology. Market quality, market integrity, and market efficiency are just the tip of the iceberg. The question is, whether there is a standard terminology. The answer is yes and no! In some areas of the profession there is an agreement on some terms, but not all. This framework sets the ground for an initiative to set a universal terminology for surveillance profession. For instance, are prohibited behavior, abusive behavior, and manipulative behavior referring to the same behavior? Again, there isn't a clear universal answer to this.

Before moving forward, we need to agree on the definition of some terms to be able to understand the concept and philosophy of surveillance. The Committee of European Securities Regulators (CESR) sets impressive definitions to some basic terms; *Market Activities* refers to the different types of operations or strategies that may be undertaken such as arbitraging, hedging, and short selling. It's considered to be too broad to address Market Abuse. While *Market Practices* would cover the way, the market activities are handled and executed. Abusive behaviors are prohibited market practices that should be handled by surveillance professionals.

## Reference Point

There are many laws, regulations, and directives issued by many jurisdictions to be the reference point for Surveillance at that specific jurisdiction. After going through them, the conclusion was evident! None of these regional laws or regulations can be selected as a reference point simply because it fits the characteristics of that specific jurisdiction. There is a generic reference to build everything around it, that's the Objectives and Principles of Securities Regulation issued by the International Organization of Securities Commission "IOSCO." To be more specific, Principle 36, states that Regulation should be designed to detect and deter manipulation and other unfair trading practices. It focuses on the regulations and mechanisms that prohibit, detect and deter manipulative (or attempts at manipulative) conduct, fraudulent or deceptive conduct, or other market abuses. The framework will use and quote articles/principles from other regulations when there is a need to clarify some specific areas.

## IOSCO Principle 36

The section is entirely taken from the Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation issued in May 2017.

Market manipulation (or attempts at manipulation), misleading conduct, insider trading and other fraudulent or deceptive conduct, may distort the price discovery system, distort prices and unfairly disadvantage investors.

Such conduct could be addressed through a number of mechanisms, which, might include: direct surveillance; inspection; reporting; product design requirements; position limits settlement price rules; or market halts, complemented by vigorous enforcement of the law and trading rules.

An effective market oversight program should have a mechanism for monitoring compliance with the securities laws, regulations and market rules, operational competence requirements, and market standards.

The regulator must ensure that there are in place arrangements for the continuous monitoring of trading. These arrangements should trigger inquiry whenever unusual and potentially improper trading occurs.

Particular care must be taken to ensure that regulation is sufficient to cover cross-market conduct, for example, conduct in which the price of an equity product is manipulated in order to benefit through the trading of options, warrants or other derivative products, or where there are multiple markets trading the same product.

Regulators should continue to assess the impact of technological developments and market structure changes on market integrity and efficiency, including algorithmic and high frequency trading. Based on this, regulators should seek to ensure that suitable measures are taken to mitigate any related risks to market integrity and efficiency, including any risks to price formation or to the resiliency and stability of markets, to which such developments give rise.

### Key Issues

1. The regulation of trading in secondary and other markets should prohibit: market manipulation (or attempts at manipulation); misleading conduct; insider trading; and other fraudulent or deceptive conduct, and apply adequate, proportionate, and dissuasive sanctions.
2. The regulator should ensure that there are in place arrangements for the continuous monitoring of trading. These arrangements should trigger inquiry whenever unusual and potentially improper trading occurs. Market authorities should have rules, compliance programs, sanctioning policies and powers to prohibit, detect, prevent and deter abusive

practices on their markets, including manipulation (or attempts at manipulation) of the market.

3. Regulation should cover cross-market conduct where, for example, the price of an equity product could be manipulated through the trading of options, warrants or OTC derivatives or other derivative products. The regulator should also work collectively and take any steps that would be appropriate to strengthen its cross-border surveillance capabilities.

4. There must be adequate information sharing between relevant regulatory authorities, sufficient to ensure effective enforcement.

5. Authorities responsible for the supervision of commodity derivatives markets (e.g., either the market, a governmental regulator or an SRO) should have the authority to access information on a routine and non-routine basis that permits them to reconstruct transactions, identify large concentrations of positions, and the overall composition of the market, including the power to access on an “as needed” basis information on the size and beneficial ownership of a trader’s related financial and underlying market positions in order to aggregate positions held under common ownership and control.

## Key Questions

1. Does the regulatory system prohibit the following with respect to products admitted to trading on authorized exchanges and regulated trading systems:

(a) Market or price manipulation (or attempts at market or price manipulation)?

(b) Misleading information?

(c) Insider trading?

(d) Front running?

(e) Other fraudulent or deceptive conduct and market abuses?

2. Does the regulatory approach to detect and deter such conduct include an effective and appropriate combination of mechanisms drawn from the following: (a) direct surveillance, inspection, reporting, such as, for example?

(i) Securities listing, or product design requirements (where applicable);

(ii) Position limits;

(iii) Audit trail requirements;

(iv) Quotation display rules;

(v) Order handling rules;

(vi) Settlement price rules;

- (vii) Market halts, complemented by enforcement of the law and trading rules; or
  - (viii) Power to obtain information on a market participant's positions in related OTC commodity derivatives and the underlying physical commodity markets.
- (b) Effective, proportionate and dissuasive sanctions for violations? In the case of exchange-traded commodity derivatives markets, does the relevant market authority have and use effective sanctioning powers to discipline its members or other authorized market participants and does it have powers to take action against non-members of the market or other market participants?
3. Are there arrangements in place for?
- (a) The continuous collection and analysis of information concerning trading activities?
  - (b) Providing the results of such analysis to market and regulatory officials in a position to take remedial action if necessary?
  - (c) Monitoring the conduct of market intermediaries participating in the market(s)?
  - (d) Triggering further inquiry as to suspicious transactions or patterns of trading?
4. If there is potential for domestic cross-market trading, are there:
- (a) Inspection;
  - (b) Assistance; and
  - (c) information-sharing, requirements or arrangements in place to monitor and/or address domestic cross-market trading abuses?
5. If there are foreign linkages, substantial foreign participation, or cross listings, are there cooperation arrangements with relevant foreign regulators, and/or markets, that address manipulation, or other abusive trading practices?
6. Regarding market authorities responsible for the supervision of commodity derivatives markets only:
- (a) Does the market authority have authority to access information on a routine and non-routine basis for regulated commodity derivatives markets as well as the power to obtain information on a market participant's positions in related OTC commodity derivatives and the underlying physical commodity markets?
  - (b) Does the market authority collect information on a routine and regular basis on relevant on-exchange commodity derivatives transactions and does it have the capability to aggregate position holder information promptly in order to identify positions under common ownership and control? Reference should be made to the commodity derivatives principles for the type of information required.

(c) In respect of OTC commodity derivatives transactions and positions, has the market authority considered what information it should collect on a routine basis and what it should collect on an “as needed” basis.

7. Does the market authority have the organizational and technical capabilities to monitor effectively the trading venues it supervises, including the ability to identify market abuse and activities that may impact the fairness and orderliness of trading on such venues?

### **Explanatory Notes**

An effective and credible market oversight program should include robust powers over fraud, market manipulation or attempts at such manipulation. These powers might be general in their application or they might relate more specifically to a particular topic of manipulation or attempted manipulation. For example, it might include manipulation or attempts at manipulation of a benchmark referenced in a financial contract or financial instrument.

## **Preventive or Corrective profession**

Is Surveillance profession a preventive or a corrective one? Surveillance goal is to limit the abusive behaviors to the minimum and detect those behaviors once they occur. Abusive behaviors cannot be prevented simply because they are practices. Investors will keep developing new prohibited practices every day. It’s the same as what police forces try to do; they try their best to reduce crimes in the society to the lowest level possible and detect the ones that occur. Unfortunately, they cannot prevent it completely.

### **Quantifying human behavior**

It’s clear now that surveillance is interested in Abusive behaviors, or shall I say practices. Those practices reflect a human thought! It’s a human action at the end. So in order to be able to analyze and detect those practices, we need to find a way to quantify those practices.

To do so, we need to spend some time talking about the very basic word, yet it is most frequently used one in the paragraphs above, which is “Market.” A market, in its essence, is a place where transactions take place. It’s a medium that allows buyers and sellers of a specific good or service to interact in order to facilitate an exchange. This type of market may be either a physical marketplace where people come together to exchange products and services in person, as in a bazaar or shopping center or a virtual market wherein buyers and sellers do not interact, as in an online market.

In other words, in every market there is a supply and demand. Buyers are the demand side and Sellers are the supply side of the market. If we go back to microeconomics class, we’ll

find that demand refers to how much (quantity) of a product or service is desired by buyers. The quantity demanded is the amount of a product people are willing to buy at a certain price. Supply represents how much the market can offer. The quantity supplied refers to the amount of certain goods producers are willing to supply at a certain price. This means that the two most important variables that characterize the market are Quantity and Price. This is the very basic level of surveillance; each order, whether it's a selling order or a buying order, must have those two variables. By analyzing those two variables, we can quantify the human practice.

## Market Liquidity

Price and volume also determine what is called "Sharemarket liquidity." Sharemarket liquidity refers to the 'ease' by which shares can be traded, and there are two essential features in defining the word ease.

1. Speed - A liquid stock is the one that can be sold quickly. For this to happen, there must always be willing buyers when sellers choose to sell.
2. Price - Liquidity also implies that a stock can be sold without materially affecting the market price. In other words, there must be sufficient demand to support the price during the transaction.

Clearly, most things can be quickly sold if sellers are willing to accept a low price. But if a significant price adjustment is required to facilitate the sale, the market is not liquid.

We can bring these two factors together and define liquidity as: "***The ability to trade a substantial amount of a financial asset at prices close to current market prices.***"

## Market Abuse

Market abuse is like theft. There are many shades of abuse in the securities trading world – from the outright prohibited to the downright frowned. At least a dozen different abuse scenarios have been identified under the Market Abuse Directive (MAD) in Europe, with many colorful labels used to describe a plethora of trading transgressions.

Market Abuse is a poorly understood phenomenon, due in part to legal standards that categorize manipulative behavior as either an act of outright fraud or as the nebulous use of market power to produce an artificial price. Never to mention the third type of behavior that can trigger a manipulation that is uneconomic trading.

Based on draft technical standards on the Market Abusive Regulation of the European Securities and Market Authority, Market manipulation as the meaning is:

- a. transactions or orders to trade which give, or are likely to give, false and misleading signals to the supply of, demand for or price of financial instruments, or which secure by a person, or persons acting in collaboration, the price of one or several financial instruments at an abnormal or artificial level unless the transaction/order to trade had a legitimate reason and conforms to accepted market practices on the regulated market concerned.
- b. transactions or orders to trade which employ fictitious devices or any other form of deception or contrivance.
- c. dissemination of information through the media which gives, or is likely to give, false and misleading signals to financial instruments where the person who made the dissemination knew, or ought to have known, that the information was false or misleading.

The Directive itself gives three particular instances of market manipulation:

- i. Conduct by a person, or persons acting in collaboration, to secure a dominant position over the supply of or demand for a financial instrument which has the effect of fixing (directly or indirectly) purchase or sale price or creating other unfair trading conditions;
- ii. The buying or selling of financial instruments at the close of the market with the effect of misleading investors acting by closing prices;
- iii. Taking advantage of occasional or regular access to the traditional or electronic media by voicing an opinion about a financial instrument (or indirectly about its issue) while having previously taken positions on that financial instrument and profiting subsequently from the impact of the opinions voiced on the price of that instrument, without having simultaneously disclosed that conflict of interest to the public in a proper and effective way.

The Financial Services Authority in the United Kingdom states that the MAD is a law that aims to fight cross-border market abuse by establishing a common approach among EU member states. There are seven types of behavior which can commit to market abuse.

1. **Insider dealing** – when an insider deals, or tries to deal, based on inside information. Improper disclosure and misuse of information are kinds of insider dealing.
2. **Improper disclosure** – where an insider improperly discloses inside information to another person.

For example, an employee finds out that his company is about to become the target of a takeover bid. Before the information is made public, he buys shares in his company because he knows a takeover bid may be imminent. Then he discloses the information to a friend. This behavior creates an unfair marketplace because the person who sold the shares to the

employee might not have done so if he had known of the potential takeover. The employee's friend also has this information and could profit unfairly from it.

**3. Misuse of information** – behavior based on information that is not generally available but would affect an investor's decision about the terms on which to deal.

For example, an employee learns that his company may lose a significant contract with its main customer. The employee then sells his shares, based on his assessment that it is reasonably certain the contract will be lost. This behavior creates an unfair marketplace as the person buying the shares from the employee might not have done so if he had the information about the potential loss of the contract.

**4. Manipulating transactions** – trading, or placing orders to trade, that gives a false or misleading impression of the supply of, or demand for, one or more investments, raising the price of the investment to an abnormal or artificial level.

For example, a person buys a large number of a particular share near the end of the day, aiming to drive the stock price higher to improve the performance of their investment. The market price is pushed to an artificial level, and investors get a false impression of the price of those shares and the value of any portfolio or fund that holds the stock. This could lead people to make wrong investment decisions.

**5. Manipulating devices** – trading, or placing orders to trade, which employs fictitious devices or any other form of deception or contrivance.

For example, buying shares and then spreading misleading information aiming to increase the price. This could give investors a false impression of the price of a share and lead them to make wrong investment decisions.

**6. Irrelevant Disclosure** – giving out information that conveys a false or misleading impression about an investment or the issuer of an investment where the person doing this knows that the information is false or misleading.

For example, a person uses an internet bulletin board or chat room to post information about the takeover of a company. The person knows the information to be false or misleading. This could artificially raise or reduce the price of a share and lead to people making wrong investment decisions.

**7. Distortion and misleading behavior** – behavior that gives a false or misleading impression of either the supply of, or demand for investment; or behavior that otherwise distorts the market in an investment.

For example, the movement of an empty cargo ship that is used for the transportation of a particular commodity could create a false impression of changes in the supply of, or demand for that commodity or the related futures contract. It could also artificially change the price of that commodity or the futures contract, and lead to people making wrong investment decisions.

### **Who is an insider?**

An 'insider' is any person who has inside information:

- a. as a result of their membership of the administrative, management or supervisory body of an issuer of qualifying investments;
- b. as a result of holding capital of an issuer of prescribed investments;
- c. as a result of having access to the information through their employment, profession or duties;
- d. as a result of criminal activities; or
- e. Which they have obtained by other means, e.g., a tip-off from a friend, and which they know, or could be reasonably expected to know, is inside information.

### **What is an inside information?**

It is precise information that is generally not available and that a reasonable investor would use to help them make investment decisions. It is also information that, if available, would be likely to affect the price of investment significantly.

Information from research or analysis is deemed to be available and is not inside information.

For example, if a passenger on a train passing a burning factory calls their broker and instructs them to sell shares in the company that owns the factory, the passenger would be acting on information that is generally available. This is because they obtained it legitimately by observing a public event.

Australian Corporations Act 2001 defines inside information as information which meets the following paragraphs: (a) the information is generally not available; (b) if the information were available, a reasonable person would expect it to have a material effect on the price or value of particular financial products.

Information is generally available if:

- (a) It consists of readily observable matter; or
- (b) both of the following subparagraphs apply: (i) it has been made known in a manner that would, or would be likely to, bring it to the attention of persons who commonly invest in such financial products whose price might be affected by the information; and since it was

made known, (ii) a reasonable period for it to be disseminated among such persons has elapsed; or

(c) It consists of deductions, conclusions or inferences made or drawn from either or both of the following: (i) information referred to paragraph (a); (ii) information made known as mentioned in subparagraph (b) (i).

A reasonable person would expect information to have a *material effect* on the price or value of particular financial products if (and only if) the information would, or would be likely to, influence decisions of people who commonly trade financial products.

## Benchmarking

The main challenge of quantifying human behavior is drawing the line that distinguishes the normal behavior from abusive behavior. The words used in defining abusive behaviors are loose; let's take artificial price as an example. What's artificial price? Some might say it's the price resulted from an uneconomic trade or transaction, or simply the price of a trade or transaction that took place out of the supply and demand law. But still, the line that distinguishes abusive from normal is not clear. In surveillance terms, this line is called benchmark.

The question now is how to set the right benchmark. That's quite a tricky question. In fact, there are two main approaches to set the benchmark: static and dynamic. It's important to mention that a wrong benchmarking will result in irrelevant red flags to the surveillance team and this negatively affects the market quality.

A static benchmark means that the surveillance team set a fixed benchmark for all the listed shares or each share separately. The main issue in this approach is subjectivity! Based on what calculation this static benchmark is determined? It's a judgment call from the surveillance personnel, and that is not an objective way to determine a benchmark. If so, then why some Exchanges use this approach? -Simply because it's straightforward. The dynamic approach requires calculation, and it's more sophisticated.

We might all agree that setting a static benchmark on an Exchange level is unrealistic because every listed share has its own characteristics. Liquidity, turnover, traded days, and many other characteristics make an Exchange level benchmarking not recommended at all. On the other hand, a static approach on listed share level could be acceptable, yet it's not the best approach.

A static approach on listed share level requires set of rules on how to calculate the benchmark. Not having such rules will affect the objectivity of the benchmark.

A dynamic approach, on the other hand, considered a more objective one. Yes, the challenge still remains on how the system calculates the benchmark, but having the

benchmark modified based on a set of rules gives higher credibility to the benchmarking process.

There might be a slight confusion between the static approach on listed share level and the dynamic approach. The difference is simple; the first is set periodically where the latter is calculated perpetually.

## Relevance of Intent

Since Surveillance is concerned about abusive behaviors, and since those behaviors reflect human thoughts that are converted into action the relevance of intent becomes a matter to discuss! Do surveillance professionals need to prove the intent of the investor who committed an abusive behavior?

It's clear that it's very difficult to determine the artificiality of a price objectively and therefore market manipulation from an economic perspective. In fact, apart from those technical problems, there is one more fatal weakness inherent in an attempt to find an objective test of market manipulation. As some leading commentators stated, "there is no objective definition of manipulation – manipulation trade must be defined with respect to the intent of the trade" because manipulative trades do not result in "objectively harmful act or bad outcome" and they "are indistinguishable from all other trades." Indeed, every transaction will naturally have an impact on the price of the security traded. A manipulative transaction may look exactly the same as a non-manipulative one in terms of its price impact and other economic indicators, and the only differentiating factor is the intention of the trader. When alleged manipulative transactions are examined in isolation without regard to the underlying intent, it would be very difficult, if not impossible, to state conclusively whether the transaction has a manipulative nature. This view about the indispensable role of intent in defining market manipulation has been supported by many commentators. In Australia, the courts have firmly and consistently recognized the importance of intent as a yardstick to discern legitimate market transactions. *Fame Decorator Agencies Pty v Jeffries Industries Ltd (1998) 28 ACSR 58* provides a good example. This case concerned the attempt of the appellant to push down the relevant share price to increase its entitlement on conversion of preference shares. The appellant sold a large amount of relevant stock within about three minutes of the close of trading, not at the highest possible price but at the lowest possible price. Since the shares were then thinly traded, this transaction easily resulted in the share price dropping from 35 cents rapidly down to 13 cents. Although this transaction appeared quite abnormal, this evidence alone was insufficient to prove that the transactions were manipulative. It was the intent behind the transactions, namely lowering the price so as to obtain more shares out of the conversion, which persuaded the court of the manipulative nature of the transaction. In fact, the court disbelieved the explanation of the appellant that the shares were sold due to pressing needs for cash to pay debts. Clearly, whether the transaction had been carried out

for the purposes stated by the appellant or due to other legitimate reasons such as complying with margin calls, the conclusion would have been different. Therefore, the trader's intention is pivotal in distinguishing legitimate and illegitimate transactions. The objectively similar transactions can be treated differently, depending on the subjective motivations of the trader which inform the issue of determining artificiality. When deciding the artificiality of a price, it will still be necessary to have regard to the individual circumstances and the intention of the trader. In short, the artificiality-based definition of market manipulation does not obviate the need to inquire into the mind of the trader.

European regulation doesn't require proof of intent in determining whether the practice is abusive or not. Under English law, if the prosecution charges a trader with market abuse, the prosecution does not need to prove intent to cancel the bid as in the US – but "behavior" which gives or is likely to give a false or misleading impression or secure the price of an investment at an abnormal or artificial level.

## **Abusive Behaviors**

Below are some abusive behaviors with the definition of each one. Those behaviors go beyond common shares:

### **Frontrunning**

Frontrunning (or trading ahead) occurs when a broker times the purchase or sale of shares of a security for his account to benefit from the price movement that follows the execution of large customer orders. Frontrunning involves a trader taking a position in a security to profit from advance non-public knowledge of an imminent order that may affect the market price of that security.

### **Tailgating**

Tailgating occurs when a broker or adviser buys or sells a security for an informed client(s) and then immediately makes the same transaction in his or her account.

### **Fail to Disclose**

The Listed Company failed to disclose material information to the public or might indicate rumors.

### **Concealing Ownership**

This is a transaction or a series of transactions which is designed to conceal the ownership of security via the breach of disclosure requirements by holding the instrument in the name of a colluding party (or parties). The disclosures are misleading in respect of the true underlying holding of the instrument. (This practice does not cover cases where there are legitimate reasons for securities to be held in the name of a party other than the beneficial

owner; e.g., nominee holdings; nor do all failures to make a required disclosure necessarily constitute market manipulation.)

### **Touting**

The practice refers to any person who is paid directly or indirectly, to recommend the sale of any security, without disclosing this fact and the amount of compensation to be received. Once someone is paid to recommend a security, this information should be provided to the market. Touting is also an unlawful practice in the securities market since it does not follow the principle of full disclosure to the market and gives an unfair advantage to some investors over others.

### **Pump and Dump**

This practice involves taking a long position in a security and then undertaking further buying activity and/or disseminating misleading positive information about the security to increase the price of the security. Other market participants are misled by the effect on price and are attracted into purchasing the security. The manipulator then sells out at the inflated price. Pump and dump is a scheme that attempts to boost the price of a stock through brokers' recommendations, internet forums, or cold-calling based on false, misleading or greatly exaggerated statements. The perpetrators of this scheme, who already have an established position in the company's stock, sell their positions after the hype has led to a higher share price.

### **Trash and Cash**

Trash and cash (or "slur and slurp") is the opposite of pump and dump. A party will take a short position in a security; undertake further selling activity and/or spread misleading negative information about the security with the purpose of driving down its price. The manipulators then close their position after the price has fallen.

### **Boiler Room Sales**

Boiler rooms use banks of telephones to make cold-calls to as many potential investors as possible using high-pressure selling techniques to persuade investors to purchase "house stocks"- stocks that the firm buys or sells as a market maker or has in its inventory. Boiler room operators typically sell worthless shares or thinly traded stocks of "microcap" or "small cap" companies.

### **Cybersmear**

Cybersmear is a practice in which individuals post malicious messages about businesses in online forums, to manipulate the stock or to hurt a company against which they have a grievance.

## **Scalping**

Scalping is the fraudulent trading practice that occurs when a person buys shares of thinly-traded, small-cap companies, and recommends the companies to the general public. When the increased demand generated by his favorable recommendations drove up the stock price, he sells the majority of his shares.

## **False Market**

It is a market where prices are manipulated and impacted by erroneous information, preventing the efficient negotiation of prices. These types of markets will often be marred by volatile swings because the true value of the market is clouded by misinformation.

## **Short and Distort**

An unlawful practice employed by unethical investors who short-sell a stock and then spread unsubstantiated rumors and other kinds of unverified bad news in an attempt to drive down the equity's price and realize a profit. This practice is known also as Bear Raid.

## **Long and Distort**

An unlawful practice employed by unethical investors who buy a stock and then spread unsubstantiated rumors and other kinds of unverified good news in an attempt to drive up the equity's price and realize a profit.

## **Stock Basher**

An individual, either acting alone or on behalf of someone else, who attempts to devalue a stock by spreading false or exaggerated claims against a public company. After the stock's price has dropped, the basher, or the basher's employer, will purchase the stock at a lower price than that he or she believes it is intrinsically worth.

## **Painting the Tape**

This practice involves engaging in a transaction or series of transactions which are shown on a public display facility to give the impression of activity or price movement in a security. This may include an unlawful practice in which traders buy and sell specific security among themselves, creating the illusion of high trading volume and significant investor interest. This can attract unsuspecting investors, who might then buy the stock and enable the traders to profit, or an unlawful action by a group of market manipulators buying and/or selling a security among themselves to create artificial trading activity. The latter, when reported on the ticker tape, lures in unsuspecting investors as they perceive an unusual volume.

## **Wash Sales**

This is the practice of entering into arrangements for the sale or purchase of a security where there is no change in beneficial interests or market risk, or where the transfer of beneficial interest or market risk is only between parties which are acting in concert or collusion. (Repo transactions and stock lending/borrowing or other transactions involving the transfer of securities as collateral do not constitute wash trades.) Wash sales include an unlawful transaction that a trader makes by simultaneously buying and selling a security through two different brokers, thereby creating the illusion of activity. The trader sometimes would use a relative to conclude such manipulative transactions.

## **Improper Matched Orders**

Transactions, where both buy and sell orders, are usually entered at the same time, with the same price and quantity by different but colluding parties.

## **Marking the Close**

Marking the close (or ramping) involves deliberately buying or selling securities or derivatives contracts at the close of the market with the aim to alter the closing price of the security or derivatives contract. This practice may take place on any individual trading day but is particularly associated with dates such as future/option expiry dates or quarterly/annual portfolio or index reference/valuation points.

## **Colluding Secondary Market of an IPO**

This practice is particularly associated with Initial Public Offers of securities immediately after trading in the security starts. Parties which have allocated stock in the primary offering collude to purchase further tranches of stock when trading begins. This will force the price of the security to an artificial level and will generate interest of other investors – at which point they sell their holdings.

## **Cornering the Market**

This is the practice of securing such control of the bid or demand-side of both the derivative and the underlying asset that leads to a dominant position. This position can be exploited to manipulate the price of the derivative and/or the asset. With regards to derivatives, in a corner, a market participant or group of participants accumulate a controlling position in an asset in the cash, derivative and other markets. The market participant or group of participants then requires those holding short positions to settle their obligations under the terms of their contracts, either by making delivery or by purchasing the asset from the manipulator, or by offsetting in the derivatives market opposite the manipulator at prices distorted by the manipulators.

In the context of a futures contract and leveraged foreign trading corners or attempts to corner, any commodity which is the subject of a futures contract.

### **Abusive Squeeze**

This involves a party or parties with significant influence over the supply of (demand for), or delivery mechanisms for a security and/or the underlying product of a derivative contract. This party exploits a dominant position in order to distort materially the price at which others have to deliver and to take delivery or defer delivery of the security/product to satisfy their obligations.

### **Capping and Pegging**

This practice involves activity on both the stock market and the derivatives market. A trader writes an option, which obliges the trader to sell to (in the case of a call option) or buy from (in the case of a put option) the option holder a specified number of shares covered by the option in order to affect the share price in a direction that will make the option unprofitable to exercise.

### **Manipulative Naked Short Sales**

A short sale is the sale of a stock the seller does not own. In a "naked" short sale, the seller does not borrow or arrange to borrow the securities in time to make the delivery within the standard settlement period. As a result, the seller fails to deliver securities to the buyer when delivery is due. Selling stock short and failing to deliver shares at the time of settlement with the purpose of driving down the security's price is a manipulative activity.

### **Pooling and Churning**

This practice can involve wash sales or pre-arranged trades executed to give an impression of active trading, and therefore investor interest in the stock.

### **Interpositioning**

Interpositioning involves a 2-step process that allows the brokerage firm to generate a profit from the spread between two opposite trades. Interpositioning can take various forms. In one form, the broker purchases stock for the brokerage firm's proprietary account from the customer sell order; and then fills the customer buy order by selling stock from the brokerage firm's proprietary account at a higher price — thus locking in a riskless profit for the brokerage firm's proprietary account. The second form of interpositioning involves the broker selling stock into the customer buy order, and then filling the customer sell order by buying stock for the brokerage firm's proprietary account at a lower price — again, locking in a riskless profit for the brokerage firm's proprietary account. In both forms of interpositioning, the broker participates on both sides of the trade, thereby capturing the spread between the purchase and sale prices, disadvantaging at least one of the parties of the transaction.

## Late Trading

This involves purchasing mutual fund shares at the closing price after the market closes. This is an investment technique involving short-term "in and out" trading of mutual fund shares, which has a detrimental effect on the long-term shareholders. The technique is designed to exploit market inefficiencies when the "net asset value" (NAV) of the mutual fund shares, which is set at the market close, does not reflect the current market value of the stocks held by the mutual fund. When a "market timer" buys mutual fund shares at the stale NAV, it realizes a profit when it sells those shares the next trading day or thereafter. That profit dilutes the value of shares held by long-term investors. Late Trading (or market timing) includes: (a) frequent buying and selling of shares of the same mutual fund; or (b) buying or selling mutual fund shares in order to exploit inefficiencies in mutual fund pricing. Market timing, while not illegal per se, can harm other mutual fund shareholders because it can dilute the value of their shares if the market timer is exploiting pricing inefficiencies. It can also disrupt the management of the mutual funds' investment portfolio and cause the targeted mutual fund to incur costs borne by other shareholders, to accommodate frequent buying and selling of shares by the market timer.

## Holding the Market

This is the practice of placing active or pending orders for a security into a market where the price is dropping rapidly in an attempt to "hold" the price of the security steady, or create a floor in the security. This practice is unlawful except the case when a broker or other party is mandated to keep the price of a security steady as part of Price Stabilization or a buy-back program. It is done only in rare cases where there is not enough market depth to hold the price.

## Ghosting

An unlawful practice whereby two or more market makers or brokers collectively attempt to influence and change the price of a stock. Ghosting is used to affect stock prices so that the manipulators can profit from the price movement.

## Freeriding

An unlawful practice where an underwriting syndicate member withholds part of a new securities issue and later sells it at a higher price. This practice involves the unlawful activity of buying a stock and selling it before paying for the purchase.

## Bucketing

The practice where a brokerage makes trades on behalf of a client and promises a certain price and/or confirms the execution of an order without actually executing it. The brokerage, however, waits until different price arises and then makes the trade, keeping the difference as profit, in an attempt to make a short-term profit.

## **Portfolio Pumping**

The unlawful act of bidding up the value of a fund's holdings right before the end of a quarter, when the fund's performance is measured. This is done by placing a large number of orders on existing holdings, which drives up the value of the securities within the Portfolio.

## **Advancing the Bid**

Increasing the bid for a security to increase its price artificially, creating the impression of strength or the illusion that stock activity has caused the increase.

## **Placing Orders without Intention to Execute**

This involves the entering of orders, especially into electronic trading systems, which are higher/lower than the previous bid/offer. The intention is not to execute the order but to give a misleading impression that there is demand for or supply of the security at that price. The orders are then withdrawn from the market before they are executed. (A variant on this type of market manipulation is to place a small order to move the bid/offer price of the security and be prepared for that order to be executed if it cannot be withdrawn in time.) These manipulative orders are entered in the pre-open sessions and also during the normal trading sessions.

## **Excessive Bid-ask Spreads**

This conduct is carried out by intermediaries who have market power, such as specialists or market makers. They act in cooperation in such a way to move the bid-ask spread to and/or to maintain it intentionally at artificial levels and far from fair values, by abusing their market power, i.e., the absence of other competitors.

## **Short and Extort**

This practice occurs when short sellers state (for example posting messages on message boards) they would stop shorting the stock if they were given money or free shares.

## **Spoofing**

Spoofing (or small lot bailing) is a fraudulent trading practice that occurs when a person uses a displayed limit order to manipulate prices, entering quotes followed by virtually simultaneous cancellations, and obtaining an improper trading advantage. The order is placed with the intention of briefly triggering a market movement from which the participant or others may benefit by trading the opposite side of the original manipulative order.

## **Overtrading**

An unethical practice employed by some brokers to increase their commissions by excessively trading in a client's account. It is also referred to as "churn and burn," "twisting" and "churning."

## **Aggressive Buy or Sell**

The aggressive buy or sell alert will identify participants that enter aggressive orders that will trade through a configurable number of price steps. Repeated patterns of this behavior by a participant would indicate that they may be explicitly trying to impact the price of a security through a pattern of ramping/dumping, rather than minimize the impact of their trades.

## **Price Driver**

This alert will identify participants that are responsible for a large proportion of price increases or decreases but only for a small proportion of traded volume.

## **Money Pass**

This alert will identify a sequence of trades for the same volume, where A buys from B at price X, followed by B buying from A at price Y.

## **Collusion**

Identify participants that generate a large amount of turnover between themselves, which largely nets out to a zero sum change in beneficial ownership, but represents a large proportion of trading in the instrument for the day.

## **Double Printing**

This alert identifies a sequence of trades where a proprietary account buys from a client account and then immediately sells to a different client account. When this happens, it is likely that the two trades could have been done as a single trade between the two client accounts.

## **Theoretical Options Price Deviation**

This alert will identify deviations between the traded price of an option and the theoretical fair price of an option based on either the Black and Scholes price or the Binomial Model price.

## **Price Change - Short Term**

Price changes within the trading session might give early warnings for abusive behaviors. This alert is on Order and Trade Levels. This may indicate there a rumor or price sensitive

information not being disclosed.

### **Price Change - Long Term**

Price changes over trading sessions might give early warnings for abusive behaviors. This alert is on Order and Trade Levels. This may indicate there a rumor or price-sensitive information not being disclosed.

### **Volume Change - Short**

An increase in trading volume within trading session might give early indicators for listed companies not complying with the disclosure regulation for price sensitive information.

### **Volume Change - Long**

An increase in trading volume within trading session might give early indicators for listed companies not complying with the disclosure regulation for price sensitive information.

### **High Order Rate**

An order level alert which might be driven by a rumor or price sensitive information.

### **High Rate of Cancellation**

Participants that continuously delete orders that are unexecuted, and enter orders which are only alive for a short period of time, may intend to give a false appearance of demand or supply for a security.

### **Large Order**

Large orders may be entered to give the intention of information based trading in a security. They may also be erroneous order entries.

### **Unusual Opening Price Movement**

Unusual price movements between the previous day's close and the current day's opening price.

### **Year High Low**

The case when a security has reached a year high or low, regardless of whether the price movement on the day is unusual or not.

### **Month/Quarter/Year End High/Low**

Securities reached a high or low price at the sensitive dates of the month, quarter and year-end.

### **Insider Dealing – Price Change**

Unusual price changes immediately before an information announcement.

### **Insider Dealing – Volume Change**

Unusual volume levels immediately before an information announcement.

### **Watch List (Insider Trading)**

The case of monitoring entering orders or executing trades of the participants on a watch list, on an instrument in which they have access to information.

## **Levels of Monitoring**

Surveillance monitor trading session on many levels, which are:

1. Exchange Level,
2. Symbol “Share” Level,
3. Broker Level,
4. Client Level “For some Exchanges.”

Over those levels both price and volume, the main two variables are monitored on order and trade levels. This gives the surveillance team comprehensive visibility over the activities taking place on the trading session.

## **Two level Surveillance Mechanism**

A two-level surveillance mechanism is a mechanism that approaches surveillance from two different perspectives; Micro level and Macro level. This analytical mechanism provides a continual development tool for the Exchange. This means that the surveillance team should analyze the activity in the market not only on a daily basis, but also on different time spans. Many abusive practices span over many trading sessions. Connecting the dots for those abusive practices requires curiosity and creative thinking.

### **Micro Level Analyses**

There should be a predefined alert for each abusive behavior. It’s important to mention that having an alert triggered doesn’t mean that there is an abusive practice in the market. It simply means that there is a suspicious behavior in the market. The surveillance team should utilize their analyzing skills to decide whether it’s an abusive behavior or not. It’s also worth mentioning that the intervention of surveillance team should be at the minimum in handling price-related cases; accurate benchmarking plays a vital role in this matter.

At this level, the team analyzes each alert separately; they should always focus on what the alert is about and analyze based on that fact. It's easy to get distracted and end up with analyses irrelevant to the alert concept. For instance, if you are analyzing a long-term price change alert that goes back 15 trading session, the close price of the last session should not be an important factor for you.

The team should classify the alert based on the analyses result, the categories for these classifications are: Normal, Under Monitoring, Red Flag, or Repetitive. Normal means that this case is not considered as abusive behavior. Under Monitoring means the team will keep this case open for a while as there isn't enough information at this point. This classification is a temporary one; the team should have a decision at the end, whether it's normal or a red flag. Red flag refers to the cases that are considered as abusive and need to escalate. Repetitive refers to a repeated alert, and the team should consider the possibility to tune the surveillance system to reduce the frequency of such alerts.

### **Macro Level Analyses**

Macro Level Analyses (MAC) focuses on analyzing alerts which have been classified as Red Flag. Eventually, they'll be categorized under one of the following two categories: Suspicious Practices Analyses (SPA), or Market Microstructure Analyses (MMA). These two categories will complete the process chain to guarantee clear and integrate procedure for efficient surveillance, and clarify the characteristics of the capital market industry in which the Exchange is operating. The outcomes of those two categories will be essential in developing regulations, instructions, and future plans for the industry at large.

### **Suspicious Practices Analyses**

Alerts which hold a flag of "SPA" indicate a possibility of Manipulation or abusive practices from Brokers, Traders, or Clients. Surveillance team should hold a record to document all SPA cases, where each case should hold a code and should be categorized according to its condition under one of the following categories:

- Manipulation,
- Insider Trading,
- Irrelevant Disclosure.

The code syntax should be "SPA-000-X ", where "000" is a serial number. After completing the analyses, an additional letter will be added to the code to show the final categorization; "SPA-000-X" where the value of "X" will be either:

- a. "M" for Manipulation,
- b. "I" for Insider Trading,
- c. "C" for Irrelevant Disclosure.

New cases with the same characteristics will hold the same code. This will help to give a deep description in no time and help to understand the behavior involved in the market.

### **Market Microstructure Analyses:**

Market Microstructure Analyses (MMA) focuses on trading rules and the information dissemination systems of a market. Market structure determines what traders can do, and what they can't do. Alerts which hold a flag of "MMA" indicates a possibility of a negative effect on liquidity or pricing due to market microstructure. As the purpose of this analysis is to define market microstructure elements we need to look at our development to reach an efficient market.

Surveillance section should hold a record to document all MMA cases, where each case should hold a code and should be categorized according to its condition.

The code syntax should be "MMA-000 ", where "000" is a serial number. After completing the analyses, an additional letter on MMA record will be added to the code to show the final categorization; "MMA-000-X" where:

- a. "L" for Liquidity,
- b. "P" for Pricing,
- c. "B" for Both, Liquidity & Pricing.

### **Pattern Analysis**

Pattern Analysis focuses on analyzing triggered alerts on a Macro level; analysts don't go through alert details but analyze the alerts trends which might help in specifying market characteristics. This type of analysis depends on the analyst's abilities to see the patterns and analyze them, for instance, price-related alerts and volume-related alerts. The analyst could look into the frequency of both types at the end of the quarter, that's the financial disclosure period, and in the middle of the quarter. The increased number of volume-related alerts at the end of the quarter is justified, but what if the price frequency didn't change! This triggers questions about the disclosure efficiency, investors' decision models, and many other factors. The findings should help the surveillance team propose valuable enhancements to help increase the market quality.

Micro analyses make known abusive behaviors visible to surveillance team. But as mentioned earlier, surveillance cannot fully prevent the abusive behavior or practices. There are always new abusive practices developed in the market. Accordingly, surveillance team should develop an efficient tool to help in unveiling those new practices. Macro-level analyses and Pattern analyses serve this purpose. They simply help the team to think out of the box; to look broadly and deeply into the activities in the market.

## Linking Alerts Together

Micro-level analyses handle each alert separately, yet one alert could contribute to triggering another one. Both alerts combined would increase the severity of the case. For instance, a large order would indicate a possible aggressive buy or sell. Both also would cause a short-term or long-term price change or could trigger a volume change alert. Each one of the alerts must be analyzed separately, but the surveillance team needs to link those related alerts together to get the big picture and understand the real intensity of the case.

A price change alert, when combined with volume change, indicates that there must be information-driven trading. Yet there is a need to verify that information, to determine whether it's a rumor spreading or not.

Linking alerts together is vital as it raises the efficiency of surveillance. It depends highly on the team's analytical skills, but those links should be shared among the team to maintain the harmony.

## Surveillance Team competencies

Curiosity is a quality related to inquisitive thinking. It's the most important quality a surveillance professional should have! He/she also should be equipped with relevant technical and analytical skills, including the ability to understand behavior of markets, collate and analyze transactions and price movements, and to project risk patterns in the market. Depending on the manner in which surveillance functions are structured within an organization, the skill sets required of surveillance professionals will include the ability to understand the trading and market environment, as well as having data-mining and technical, analytical skills to conduct a subsequent detailed analysis. Surveillance analysts may also be required to provide expert evidence in court to support the case for market misconduct.

## Technology

Technology is considered an important factor in capital markets. It is constantly shaping the industry and surveillance field is no exception. Trading systems now execute trades in milliseconds. Taking into account this huge capacity, there must be a surveillance system which can monitor and analyze those trading systems. Surveillance system plays a vital role in maintaining market integrity. Algorithmic trading, automated trading, and high-frequency trading are empowered by technology and so the surveillance systems.

IOSCO Principle 12 requires the regulator to demonstrate how the regulatory system in place, and its own organization, provides for an effective and credible use of inspection, investigation, surveillance and enforcement powers and compliance programs. In particular,

the regulator should be able to demonstrate that there is a system to take effective inspection, investigation, surveillance and enforcement actions and that, where appropriate, actions have been undertaken to address misconduct or abuses. An effective program, for example, could combine various means to identify, detect, deter and sanction such misconduct. A wide range of possible sanctions could meet the standards according to the nature of the legal system assessed.

### **Algorithmic trading**

Algorithmic trading refers to trade execution strategies that are typically used by fund managers to buy or sell large amounts of assets. They aim to minimize the cost of these transactions under certain risk and timing constraints. Such systems follow preset rules in determining how to execute each order. People often think of these systems as buying low and selling high – making investment decisions – but this is not the case. Algorithmic trading systems are offered by many brokers and simply execute the orders that they are given. Their job is to get a good price (as compared to various benchmarks) and minimize the impact of trading. This is done by slicing orders and dynamically reacting to market events.

Trading venues should have a number of systems, procedures and arrangements in place to ensure that algorithmic trading systems cannot create or contribute to disorderly trading conditions including systems to monitor and, where appropriate, limit the ratio of unexecuted orders to transactions. They should calculate the ratio of unexecuted orders to transactions effectively incurred by their members or participants at the level of each financial instrument traded on them in order to ensure effectively that the ratio does not lead to excessive volatility in that instrument.

Trading venues shall calculate the ratio of unexecuted orders to transactions for each of their members or participants at least at the end of every trading session in both of the following ways:

- (a) in volume terms : (total volume of orders/total volume of transactions) – 1
- (b) in number terms : (total number of orders/total number of transactions) – 1

Of course, some algorithms deal with investment decision making, and this is where automated trading comes in.

### **Automated trading**

Automated trading, often confused with algorithmic trading, is the complete automation of the quantitative trading process. Thus, automated trading must encapsulate: quantitative modeling and indicator tracking to determine trade initiation and closeout; monitoring of portfolio risk; as well as algorithmic trading. This type of trading tends to be done by

quantitative hedge funds that use proprietary execution algorithms, and trade via DMA or sponsored access.

### **High-frequency trading (HFT)**

High-frequency trading (HFT) is a subset of automated trading. Here, opportunities are sought and taken advantage of very small timescales; from milliseconds up to hours. Some high-frequency strategies adopt a market maker type role, attempting to keep a relatively neutral position and providing liquidity (most of the time) while taking advantage of any price discrepancies. Other strategies invoke methods from time series analysis, machine learning and artificial intelligence, to predict movements and isolate trends among the masses of data. Specifics of the strategy aside, for HFT, monitoring the overall inventory risk and incorporating this information into pricing/trading decisions is always vital.

## FEAS Region Behaviors

Below are the behaviors faced by FEAS members where they have predefined parameters. This section shows the actions of the members, with a brief description of the surveillance mechanism they have. The behaviors below are the ones defined by more than one member, **and the information below is mentioned as received from Members:**

Advancing the Bid			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Order	A lot of new entered orders followed by a small price change.	We check orders, Trends of price and fundamental changes in the symbol.	If we find irrational orders, we warn brokers, and if they continue and change the price to profit, we send a report to the Department of criminal & judicial affairs.
	Seconds between trades, small price change.	Business analyses are performed by employees of the Exchange in the sector of surveillance.	Pursue an order in the Exchange, and check the order book for the same Order in members' premises.
	Manipulating Devices, Price Upping the bid	In accordance with the Rules of the Exchange, based on activated alerts, we will do analyses for a longer period than one trading day, to see general acting of participants.	Carry out document inspection to establish the circumstances and confirm/deny suspicions. If market abuse is detected we will send a report to the Regulator.

Aggressive Buy or Sell			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Order-Trade	-	Before the opening of the market, we always check orders in all symbols and analysis them with news about them if we see abnormal variation we try to find reasons, so if number of investors and variety of brokers could help us to find reasons. Sometimes in social network (telegram groups) some investors collude to move the price. Fortunately we check them and find groups.	If we find participants who want to mislead symbol, we warn them, and if they continue, we send a report to the Dep. of criminal & judicial affairs. Within 15 days from revealing, the transaction goes through the Expert Committee. Then upon the decision of the Expert Committee, it goes to the National Bank to get a final decision and issue sanctions if necessary.

Boiler Room Sales			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Trade - Broker	Volume, price, Huge clients from the only broker	When we find someone who sells a large number of stocks, we try to find reasons in public news, but sometimes they have groups in a telegram and so on. Then if we find reasons and collusion in their movement, we prepare documents. Investigate whether the orders for all clients are from the only broker, watch the next step.	We'll send a report to Dep. of criminal & judicial affairs.

Collusion			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Trade	A frequent occurrence of the same accounts on the bid and the ask sides.	<p>Reports that show top buyers or sellers in each asset help us to reach this, but we have some holdings that their subsidiaries trade some of their own stocks in order to be a participant like a market maker.</p> <p>Very rare cases where the Exchange does not have information on the beneficial owners of the account (money, stocks).</p> <p>Business analyses are performed by surveillance sector employees of the Exchange in accordance with the Rules of the Stock Exchange.</p>	<p>If we detect some manners opposite of law, we warn them, and maybe we send a report to the Dep. of criminal &amp; judicial affairs.</p> <p>Within 15 days from revealing, the transaction goes through the Expert Committee. Then upon the decision of the Expert Committee, it goes to the National Bank to get a final decision and issue sanctions if necessary.</p> <p>The Exchange shall impose the measure in the field of their jurisdiction or forward the case to Securities Commission for further processing.</p>

Double Printing			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Trade	-	<p>Because of transaction cost, we cannot find such trades, but we have reports that find speculators. We consider them as a market participant.</p> <p>Business analyses are performed by surveillance sector employees of the Exchange, in accordance with the Rules of the Exchange</p>	<p>We just find them and keep their movement under surveillance.</p> <p>Pursuant to an order of the Exchange, a control of a Stock Exchange member and insight into their Order book will be done in members' premises.</p>

Fail to Disclose			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Symbol	Stock movement in Volume or Price	<p>According to activated alerts, we will do analyses in for a longer period than one trading day, to see general actions of participants.</p> <p>Company analysis and analysis of the open sources.</p>	<p>The Exchange sends a letter warning to a company and informs the regulator on that. The regulator makes a punishment and imposes a penalty on a company.</p> <p>If market abuse is detected, we will send a report to the Regulator.</p>

Fail to Disclose			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Symbol Broker Trade	Positioning in front of the large ask or bid accounts by the certain account from the Order book.	<p>After movement of large customers, we run the program check the results. Program results show participants who have co-movement. After that, we get the final results by entering results in special reports in Business Intelligence.</p> <p>Business analyses are performed by surveillance sector employees of the Exchange in accordance with the Rules of the Exchange.</p> <p>If necessary, we will do analyses in for a longer period than one trading day, to see general actions of participants.</p>	<p>We'll send a report to the Dep. of criminal &amp; judicial affairs.</p> <p>The subject will be prosecuted to the Securities Commission because the Exchange doesn't have information about the share's owner; in trading system of Exchange only number of accounts can be seen.</p> <p>If market abuse is detected, we will send a report to the Regulator.</p>

<b>High Rate of Cancellation</b>			
<b>Alert Level</b>	<b>Indicators</b>	<b>Surveillance Mechanism</b>	<b>Action when Detecting</b>
<b>Order</b>	The frequent entering and pulling-back of orders in the Order book.	<p>We create some reports that warn us when someone puts order and delete it consequently. So we check the frequency and volume and then we decide.</p> <p>Business analyses are performed by surveillance sector employees of the Exchange in accordance with the Rules of the Exchange.</p>	<p>If this activity affected the trend of trade, we call the broker and warn them; and if that cancellation was normal and about the news, the variation of news, we ignore it.</p> <p>The Exchange shall impose the measure in the field of their jurisdiction or forward the case for further processing to Securities Commission.</p>

<b>Holding the Market</b>			
<b>Alert Level</b>	<b>Indicators</b>	<b>Surveillance Mechanism</b>	<b>Action when Detecting</b>
<b>Client</b>	-	<p>During last two year we had a volatile market, and, because of a strategic decision, a mutual fund with huge capital participates in deals and tries to create a floor for stocks at their fair prices. We know their activities and limit them. Now, improvements in market deactivate them and put them on the sell side.</p> <p>Investigate whether the investor's bids are real.</p>	Penalties and Legal actions.

<b>Improper Matched Orders</b>			
<b>Alert Level</b>	<b>Indicators</b>	<b>Surveillance Mechanism</b>	<b>Action when Detecting</b>
<b>Trade</b>	-	<p>We design alerts that show us variation between sequence trades. So, if the variation is greater than the threshold, we see alerts and check them.</p> <p>Business analyses are performed by employees of the surveillance sector of the Exchange in accordance with the Rules of the Exchange.</p>	<p>If high volatility trades were abnormal, we warn broker and sometimes, if it affected close price and had high volume, we cancel it.</p> <p>Pursuant to an order of the Exchange, a control of a Stock Exchange member and insight into their Order book will be done in members' premises.</p>

Insider Dealing – Price Change			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Symbol Trade Price	<p>Static limit of price (limit to +/- 10% of the average price of the previous day on the Official Market and +/- 20% of the average price of the previous day on the Free Market segment) and dynamic limit of price (+/- 5% of the average price, as a signal to investors, during the trading day on the Official Market).</p> <p>The Exchange does not have information on the beneficial owners of the account.</p>	<p>After disclosure and symbol opening we check last (one or two) month before closing and a period after opening. In order to find a good result, we calculate the profit of investment for suspicious people. So we can find some suspicious investors who have a significant behavior in trades, and focus on all their investment in that symbol.</p>	<p>If we find a strong hypothesis about this violation we send a report to the Dep. of criminal &amp; judicial affairs.</p> <p>Within 15 days from revealing, the transaction goes through the Expert Committee. Then upon the decision of the Expert Committee, it goes to the National Bank to get a final decision and issue sanctions if necessary.</p> <p>The Exchange shall impose the measure in the field of their jurisdiction or forward the case to Securities Commission for further processing.</p>

Insider Dealing – Volume Change			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Symbol Trade Order	-	<p>After disclosure and symbol opening we check last (one or two) month before closing and a period after opening. In order to find a good result, we calculate the profit of investment for suspicious people. So we can find some suspicious investors who have a significant behavior in trades, and focus on all their investment in that symbol.</p> <p>Very rare cases where the Exchange does not have information on the beneficial owners of the account (money, stocks).</p>	<p>If we find a strong hypothesis about this violation, we send a report to the Dep. of criminal &amp; judicial affairs.</p> <p>Within 15 days from revealing, the transaction goes through the Expert Committee. Then upon the decision of the Expert Committee, it goes to the National Bank to get a final decision and issue sanctions if necessary.</p> <p>The Exchange shall impose the measure in the field of their jurisdiction or forward the case for further processing to Securities Commission.</p>

Insider Dealing – Volume Change			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Symbol Trade Order	-	<p>After disclosure and symbol opening we check last (one or two) month before closing and a period after opening. In order to find a good result, we calculate the profit of investment for suspicious people. So we can find some suspicious investors who have a significant behavior in trades, and focus on all their investment in that symbol.</p> <p>Very rare cases where the Exchange does not have information on the beneficial owners of the account (money, stocks).</p>	<p>If we find a strong hypothesis about this violation, we send a report to the Dep. of criminal &amp; judicial affairs.</p> <p>Within 15 days from revealing, the transaction goes through the Expert Committee. Then upon the decision of the Expert Committee, it goes to the National Bank to get a final decision and issue sanctions if necessary.</p> <p>The Exchange shall impose the measure in the field of their jurisdiction or forward the case for further processing to Securities Commission.</p>

Interpositioning			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Order Trade		<p>We always check brokers with the net quality of zero but high profit. Some of them are on our speculative watch list, but we focus on news one.</p> <p>Business analyses are performed by employees of the surveillance sector of the Exchange in accordance with the Rules of the Exchange.</p>	<p>If we find a strong hypothesis about his violation, we send a report to the Dep. of criminal &amp; judicial affairs.</p> <p>Pursuant to an order of the Exchange, a control of a Stock Exchange member and insight into their Order book will be done in members' premises.</p>

Long and Distort			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Symbol Client	Order, Trade, price movement	<p>We detect the relation between news presses and financial institutions. So considering the active participants in each symbol, we check the relation between news and that participant.</p> <p>According to activated alerts, we will do analyses for a longer period than one trading day, to see general actions of participants.</p>	<p>We'll send a report to the Dep. of criminal &amp; judicial affairs.</p> <p>If market abuse is detected, we will send a report to the Regulator.</p>

Marking the Close			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Trade Price Broker	<p>Repeatedly increasing the bid at or near the close of the market, or purchasing the stock at or near the close of the market at an uptick.</p> <p>Price of closing auction deviates by a certain amount from previous trade price.</p> <p>Marking the Close alert tracks the activities at the closing period of every trading day. You can specify the beginning of the closing period by time in the alert parameters: "Time after which to look for marking." The alert will trigger for each participant (Client/Trader/Broker) when the total volume of orders within the closing period exceeds the threshold you specify under: "Total order volume."</p>	<p>Every day we check the trades in detail. So, considering the last trades and trend of trades, we decide about extreme price trades.</p> <p>Business analyses are performed by employees of the surveillance sector of the Exchange in accordance with the Rules of the Exchange.</p> <p>Watch the prices of the stocks and compare the last transaction.</p> <p>If necessary, we will do analyses for a longer period than one trading day, to see general actions of participants.</p>	<p>If we find trades with low volume and high price change or only one trade with the price change against the expectations, we decide about the cancellation.</p> <p>The subject will be prosecuted by the Securities Commission, which controls the work of investment funds.</p> <p>If market abuse is detected, we will send a report to the Regulator.</p>

Money Pass			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Trade	-	<p>Every day we review investors' trade which net of investor is zero or near. This is done by a report in Business intelligence software.</p> <p>Company analysis, letters to Brokers requesting an explanation of behavior.</p>	<p>If we detect investors who have money pass behavior, we search in detail about the time of ordering, brokers and price changes affected by those trades. Then we decide to cancel it or not.</p> <p>Within 15 days from revealing, the transaction goes through the Expert Committee. Then, upon the decision of the Expert Committee, it goes to the National Bank to get a final decision and issue sanctions if necessary.</p>

Painting the Tape			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Trade Volume	-	<p>We check most active investors and brokers in each symbol. Some of them are not formal market makers, but they trade as a market maker.</p> <p>In each symbol, if high volume traded investors frequently change their position in buy and sell side we put them on the watch list, or if they have zero net trades, we find them.</p> <p>According to activated alerts, we will do analyses for a longer period than one trading day, to see general acting of participants.</p>	<p>If we find a repeated pattern in their trades, we warn them, and in some special cases, when they have a net volume of zero, we may cancel the deal.</p> <p>If market abuse is detected, we will send a report to the Regulator.</p>

Placing Orders without Intention to Execute			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
<b>Order</b>	<p>The frequent entering and pulling-back of orders in the Order book.</p> <p>Order withdrawal.</p> <p>Order deletion right before the market opens/opening auction executes.</p>	<p>We grant a license of algorithmic trading to market makers and create reports in business intelligence to keep their performance under surveillance. We check trend of symbol price and market maker's order with NAV. For other kinds of orders, we just check high order rate, high rate of cancellation and other criteria for checking orders.</p> <p>Business analyses are performed by employees of the surveillance sector of the Exchange in accordance with the Rules of the Exchange.</p> <p>Investigate the investors who place orders and then withdraw them without execution.</p> <p>If necessary, we will do analyses for a longer period than one trading day, to see general actions of participants.</p>	<p>If market abuse is detected, we will send a report to the Regulator.</p> <p>Pursuant to an order of the Exchange, a control of a Stock Exchange member and insight into their Order book will be done on members' premises.</p>

Pooling and Churning			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
<b>Broker</b>		Check-up of the liquidity level of a particular stock.	Within 15 days from revealing, the transaction goes through the Expert Committee. Then upon the decision of the Expert Committee, it goes to the National Bank to get a final decision and issue sanctions if necessary.

Portfolio Pumping			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Price Order	The increase in securities' prices of a portfolio, on a specific date. Increasing the bids near the close, Price, Bid.	We check orders for investors, and we don't separate them. So, if they try to manipulate price by ordering, we warn them to treat all investors equally. We think this is like placing orders without intention to execute and advancing the bid. Business analyses are performed by employees of the surveillance sector of the Exchange in accordance with the Rules of the Exchange. Investigate funds' transactions at the end of quarters.	The subject will be prosecuted by the Securities Commission, which controls the work of investment funds.

Price Change - Long Term			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Price	-	We generate some graphs that show a period volume and price changes, so we find irrational movements because changes in volume and price should consider with each other. Now we are making an index to summarize both price and volume into a number, after which we can set some threshold for that and give some alerts automatically. After finding symbols, we search for reasons. Business analyses are performed by employees of the surveillance sector of the Exchange in accordance with the Rules of the Exchange.	If we guess about some suspicious issues in trades, we add a symbol to the watch list and follow its factors and participants.  The Exchange shall impose the measure in the field of their jurisdiction or forward the case for further processing to Securities Commission.

Pump and Dump			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Order Client		By checking two-sided orders (except market makers) we found participants, and after we focus on their trades. Company analyses and analyses of the open sources. According to activated alerts, we will do analyses for a longer period than one trading day, to see general actions of participants.	We'll call the broker and warn him. The Exchange sends a letter of warning to a company and informs the regulator about it. The regulator makes a punishment and imposes a penalty on a company. If market abuse is detected, we will send a report to the Regulator.

Spoofing			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
order	-	<p>When an investor creates and deletes orders repeatedly, we can find him in our business intelligence software.</p> <p>If necessary, we will do analyses for a longer period than one trading day, to see general acting of participants.</p>	<p>We call to his broker and ask him to warn investor. If he doesn't do it, we send a report to Dep. of criminal &amp; judicial affairs.</p> <p>If market abuse is detected, we will send a report to the Regulator.</p>

Stock Basher			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Price Client	-	<p>In surveillance department, each expert focuses on a group of symbols. Every day he/she writes the story of that symbol in a list. So we always know that's going on a symbol. During some periods we find some new investors with high volume purchase or sell or some unexpected changes in a symbol. So we focus on it and try to detect causes. Check news, rumors and address the company to confirm or deny the rumors. Investigate the main buyers.</p>	<p>When we find somebody (a group of investors or some broker) who participates in decreasing the price and profiting from price movement, we send a report to the Dep. of criminal &amp; judicial affairs.</p> <p>Penalties, Legal actions.</p>

Tailgating			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Symbol Trade	<p>"Following" a large ask or bid account by only one account.</p> <p>Seconds between trades (depends on market conditions).</p>		<p>The subject will be prosecuted by the Securities Commission because the Exchange doesn't have information about the share's owner; in trading system of MNSE only number of accounts can be seen.</p>

Trash and Cash			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Order	-	By checking two-sided orders (except market makers) we found participants and after that focus on their trades. Company analyses and analyses of the open sources.	Call the broker and alarm him.  The Exchange sends a letter of warning to a company and informs the regulator about it. The regulator makes a punishment and imposes a penalty on a company.

Unusual Opening Price Movement			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Symbol Trade	Price deviation from the previous transaction price of shares by 15% or more, of bonds by 7%.	After disclosure and symbol opening we check last (one or two) month before closing and a period after opening. In order to find a good result, we calculate the profit of investment for suspicious people. So we can find some suspicious investors who have a significant behavior in trades, and focus on all their investment in that symbol.  Analyses on manipulating and usage of insider information.	If we find a strong hypothesis about this violation, we send a report to Dep. of criminal & judicial affairs.  Within 15 days from revealing, the transaction goes through the Expert Committee. Then upon the decision of the Expert Committee, it goes to the National Bank to get a final decision and issue sanctions if necessary.

Volume Change - Short			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
<b>Volume Price</b>	Static limit of price (limit to +/- 10% of the average price of the previous day on the Official Market and +/- 20% of the average price of the previous day on the Free Market segment) and dynamic limit of price (+/- 5% of the average price, as a signal to investors, during the trading day on the Official Market).	We generate some graph that shows a period volume and price changes, so we find irrational movements, because changes in volume and price should consider with each other. Now we are making an index to summarize both price and volume into a number, after which we can set some threshold for that and give some alerts automatically. After finding symbols, we search for reasons. Business analyses are performed by employees in the sector of surveillance at the Exchange in accordance with the Rules of the Exchange.	<p>If we guess about some suspicious issues in trades, we put the symbol on the watchlist and follow the factors and participants of it.</p> <p>The Exchange shall impose the measure in the field of their jurisdiction or forward the case for further processing to the Securities Commission.</p>

Wash Sales			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Symbol Order Client	-	<p>Price changes and volume changes between the current and last trading sessions are provided in a report. We always check them considering news and fundamental changes in the symbol. Due to valuation reports and news around symbol, we will know what is going on. Then if it shows divergence in trades movement and fundamental reasons, we search for the reason of deviation between brokers and investors who traded and put them on the watchlist. Sometimes, because of large IPO's, technical indicators and many other reasons cause these kinds of deviation.</p> <p>Price analysis for the previous reporting period aims to reveal precedents of imitation of a vigorous trade.</p> <p>Business analyses are performed by employees of the surveillance sector of the Exchange in accordance with the Rules of the Exchange.</p> <p>If we detect the same end client on buy and sell side, the trade will be canceled.</p>	<p>If we find a repeated pattern, we'll call the broker and warn them, and in some cases we'll send a report to the Dep. of criminal &amp; judicial affairs. Within 15 days from revealing, the transaction goes through the Expert Committee. Then upon the decision of the Expert Committee, it goes to the National Bank to get a final decision and issue sanctions if necessary.</p> <p>Pursuant to an order of the Exchange, a control of a Stock Exchange member and insight into their Order book will be done on members' premises. The stock exchange will cancel the trade on the same trading day when it occurs and will send a report to the Regulator.</p>

Watch List (Insider Trading)			
Alert Level	Indicators	Surveillance Mechanism	Action when Detecting
Client	Set A watch list of all stock's insiders. In a database, whenever there is material information, insiders' trades in news time period are checked.	<p>We add suspicious investors and people who have inside information on our watchlist. We update it every day based on the events of the market and share this list with our inspections.</p> <p>Very rare cases where the Exchange does not have information on the beneficial owners of the account (money, stocks).</p> <p>Investigate the history of investor transactions on the same stock after any material information.</p>	<p>If we see some abnormal behavior from their side, we warn them, and if we mention some illegal manner, we provide a report and send it to the Dep. of criminal &amp; judicial affairs.</p> <p>Within 15 days from revealing, the transaction goes through the Expert Committee. Then upon the decision of the Expert Committee, it goes to the National Bank to get a final decision and issue sanctions if necessary.</p> <p>Penalties, Legal actions.</p>

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