The article explores the changes in supervision over compliance in the financial services world, driven by technological developments, regulatory reform, and regulatory enforcement actions. Today, supervision has taken on a much greater role in overall risk management, in particular protecting the firm from reputational harm. This article examines these changes, analyzes risks that must be addressed by supervisory personnel, and recommends a new paradigm of comprehensive supervisory control to address these risks.

**Technological Development in the Securities Markets**

Technological changes in the securities markets have dramatically increased the need for supervisory controls while altering the inherent nature of those controls. These changes include the proliferation of electronic trading systems, direct market access programs, sophisticated algorithmic trading, electronic market making in the stock and options markets, and straight-through processing of transactions from execution to settlement. Activities that in the past were performed manually in a few seconds or minutes are now done automatically in milliseconds. A single error programmed in a trading system can result in hundreds or thousands of violations of the law before the error is discovered.

This trend will accelerate further with the continuing rollout of SEC Regulation NMS and related market structure changes throughout this year. Regulation NMS is a series of initiatives designed to modernize and strengthen the national market system for equity securities. The rule has already changed the basic market structure of US equity markets, engendering a faster electronic marketplace.
and forcing every equity exchange and market in the United States to revamp its trading system. Pressure is being placed on the remaining floor based trading systems, the NYSE and AMEX, which have adopted hybrid trading systems to compete in this electronic market.

**Regulatory Actions**

The NASD and the NYSE recently have adopted enhanced supervisory requirements requiring, among other things, a comprehensive review and testing of supervisory procedures and CEO certification regarding the integrity of supervisory systems. The SEC has encouraged firms to build “strong supervisory, compliance, risk management, surveillance, and internal audit programs.” A senior SEC official has stated, “Supervision continues to be the top examination priority for the SEC examination program.”

Regulators at all levels have beefed up their examination and disciplinary efforts with regard to systemic and operational failures. These efforts have resulted in substantial fines and penalties against major firms. Through these actions, the regulators have served notice that they will hold broker-dealers liable for systemic failures even when there is no intentional wrongdoing, and, in some cases, no underlying violation other than the control failure itself.

Most recently, the SEC brought an administrative proceeding against Morgan Stanley alleging that the firm embedded undisclosed mark-ups and mark-downs in certain OTC executions and delayed execution of other orders, thereby not providing best execution to its retail customers. The SEC alleged that the firm was reckless in improperly programming its automated OTC market maker system, which caused the errors. Without admitting or denying the allegations, the firm agreed to pay a civil monetary penalty of $1.5 million and disgorgement plus interest of approximately $6.4 million. The firm also agreed to retain an independent compliance consultant to conduct a comprehensive review and provide recommendations on its automated retail order handling system. In announcing the decision, Elaine Greenberg, Associate Administrator of the SEC’s Philadelphia Regional Office, stated that “You can’t blame it on the computer. The message in this case is to put brokers on notice that the Commission is going to be looking at automated systems…”

Also in 2006, the SEC also had fined Morgan Stanley $10 million. The SEC found that for several years the firm failed to maintain and enforce adequate written policies and procedures to prevent the misuse of inside information. Due to a systemic breakdown, the SEC alleged that the firm failed to conduct any surveillance on a massive number of employee trading accounts to assure compliance with the policy, and employed inadequate controls with respect to certain aspects of its watch list compliance. Linda Chatman Thomsen, Director for the SEC’s Division of Enforcement, stated that “establishing and enforcing adequate written policies and procedures to detect insider trading at securities firms is vital… Firms must devote sufficient resources and attention to this critical area.”

On October 18, 2005, the SEC and NASD brought joint disciplinary action against Instinet and INET assessing $1.5 million in penalties. A crucial part of the overall findings was failure to supervise the firm’s systems. “A firm’s duty to supervise automated systems is every bit as important as its duty to supervise employees,” said NASD Chairman Mary L. Schapiro. “When critical tasks are automated, firms must verify that the automation functions as intended. These firms' failure to meet that responsibility seriously compromised market participants' access to reliable information crucial for making informed trading decisions.”

In 2006, the NYSE Enforcement Division fined 20 firms for submitting incomplete or inaccurate trading data in response to blue sheet requests. “Breakdowns in operational controls can have an adverse impact on investors,” said Susan Merrill, head of NYSE Enforcement. In this case, “firms allowed their systems to run on autopilot, with no way to see if new products or mergers or upgrades didn’t result in their reporting systems being out of whack.”

In 2005, the NYSE fined Merrill Lynch $10 million for various operational and supervisory failures, including the failure to deliver a prospectus to over 65,000 customers. The prospectus delivery violations were caused by coding problems when the firm made a change to its operating system in 2002. Susan Merrill
again stated, “Internal controls at member firms cannot run on autopilot, but must be reviewed periodically to ensure that firms are complying with their responsibilities under securities laws and NYSE rules.”

Previously, the NYSE fined Morgan Stanley $19 million in two separate actions for failures to provide for proper implementation of systems to ensure adequate supervision of customer accounts and for failure to comply with prospectus delivery requirements, among other supervisory and operational control failures. In response, Richard Ketchum, Chief Regulatory Officer at the NYSE announced that the NYSE had set up Risk Assessments teams to identify regulatory, operational and supervisory risks.

Finally, in 2004, the NASD fined 18 firms for violations of the OATS requirement and for supervisory failures. One broker-dealer, SG Cowan, was fined $800,000, including $500,000 for supervisory failures. According to the NASD findings, operational changes to the reporting system at that firm caused the OATS failures, but the firm failed to discover the problems for four years because of inadequate supervisory follow-up.

Hidden Costs of Noncompliance

As noted, the actual cost of regulatory fines and penalties has grown exponentially in the past few years. But this is only part of the story. The hidden costs of noncompliance are extensive and occur at every level of the regulatory process: initial inquiry, formal investigation, settlement stage, litigation stage, penalty phase, and ongoing operational costs of dealing with findings. Hidden costs include such things as internal staff and management time to deal with these matters, expenditures to outside counsel and experts to resolve issues, the expense of meeting regulatory requests for information, remediation of problems, and loss of revenue due to reputational harm.

The cost analysis is further complicated by the contingent nature of liability, i.e., a particular problem may never be discovered by the regulators and therefore actual costs may never be incurred. Even if a problem is discovered, it may not result in actual costs to the firm for a number of years, by which time the P&L has already been booked and employee bonuses paid. Responsible employees may have left the firm or moved to different positions, never knowing the negative impact of the problems they left behind. And, past success tends to remove the urgency and undercut concern about future risks. Complacency leads to underresourcing of critical control functions. The fact that certain firms have avoided large regulatory penalties in the past does not mean that the current level of resources dedicated to supervision and compliance is sufficient.

Reputational harm caused by supervisory failures can have a devastating effect on the success and growth of the business. The enforcement actions over the past five years have awakened firms to the dangers of weak or noncompliance. Nonetheless, staffing and resources, particularly IT support, still lag behind the expectations of the regulators. Individual issues and concerns should be prioritized based on the potential costs and risks of noncompliance. Adequate resources must be allocated and maintained, and historic shortfalls must be corrected. Management must support these developments and initiatives. Cost cutting measures should not overvalue current cost savings against future risk.

Basic Elements of Supervisory Risk

The first step in establishing a successful supervisory program is identifying the risks to be managed. The following six basic supervisory risks must be addressed by every broker-dealer.

1. PEOPLE: The greatest supervisory risk to a firm is the people who work at that firm. Assuring that employees comply with all applicable rules and regulations is the key to a successful supervisory program. Written supervisory procedures supplemented by appropriate training are essential to minimizing this risk. Proper hiring and screening of personnel as well as ongoing monitoring of employee activity are also important.

2. PROCESS: Another supervisory risk is the way things are done, i.e., the established process for completing tasks. Written procedure manuals, compliance manuals, supervisory manuals, and effective tracking mechanisms are fundamental components of an effective supervisory program.
3. **RISKS:** All types of risk must be addressed including business risk, market risk, operational risk, systemic risk, regulatory risk, and reputational risk. Risk management systems are the principal supervisory tools to minimize such risks.

4. **INFORMATION:** One of the foundations of compliance is the creation and maintenance of accurate books and records. This is critical for almost every area of the firm’s business to run successfully. Without proper information technology and data management programs, many of the other components of a supervisory control system will be ineffective.

5. **SYSTEMS:** Systems must be properly built and maintained to assure continuing compliance with the myriad regulatory requirements facing a securities firm. The protections must be built into the system, monitored, and updated as necessary.

6. **MANAGEMENT:** The key to supervision is a management philosophy that good compliance is critical to the business of the firm. A culture of compliance must be established and passed down through all levels of the firm, with adequate resources allocated to assure appropriate supervisory and compliance controls are in place.

### The New Paradigm: A Comprehensive Supervisory Control Program

The new paradigm for supervision is to implement a comprehensive supervisory control program that addresses each of these major risks. Today, more than ever before, such a program must rely on the cooperation of multiple disciplines throughout a firm to function correctly. Increasingly, the firm’s infrastructure, including data management, systemic control, and operational support, are critical elements that provide a strong base to the entire supervisory control process. Without complete and accurate data, there is no way to meet regulatory reporting requirements, survey for potential problems, or answer regulatory inquiries or litigation requests. Without the proper systemic controls, there is no way to assure that automated trading systems will conform to regulatory requirements. Without adequate operational support, front office business will not function in compliance with regulatory requirements.

Exhibit 1 lays out the necessary components of a comprehensive supervisory control program. Each component of the structure is discussed below.
Corporate Culture of Compliance

The most critical element of a successful supervisory program is a corporate culture of compliance. The message that compliance is important and even integral to success of the business must be imbedded in the corporate culture. This message must be adopted by senior management and conveyed to the entire organization through line management. To the extent possible, successful compliance with the securities laws must be rewarded. Failure to engender this compliance culture should be penalized through monetary and other penalties such as decreased bonuses, denial of promotions, and in the most egregious situations, suspension or permanent removal from supervisory positions. Specific supervisory responsibility should be assigned for all areas of the firm’s operations with clear reporting lines to the head of the firm.

Strong Management Support

Supervisors at all levels should emphasize the importance of earning and maintaining a reputation of trust and fair dealing. They also should highlight the negative consequences that can result from inattentive or improper conduct (e.g., regulatory action, litigation, internal discipline, monetary losses, and adverse publicity). Supervisors should continually convey these messages to their subordinates and meet with them periodically to encourage routine dialogue concerning compliance issues. In addition, supervisors should foster an atmosphere that encourages subordinates to bring to their attention any circumstances that have the potential to become significant compliance issues.

Compliance and Supervisory Infrastructure

A strong supervisory control program should be directly supported by a number of logistical areas of the firm. These areas should work together to develop, implement, and maintain a supervisory culture and structure. Each area has its specific responsibilities but it is the joint efforts of the groups working together that will ultimately result in successful supervision.

Legal. The Legal Department is critical in identifying and interpreting legal and regulatory requirements and assisting the compliance department and the supervisors in developing and implementing appropriate compliance and supervisory procedures. The Legal Department also provides ongoing regulatory advice to the various businesses and represents the firm in internal investigations, regulatory inquiries and litigation when problems arise.

Compliance. The Compliance Department serves a number of vital functions in support of the supervisory program including advice, education, monitoring and surveillance, and risk assessment. Compliance is also responsible for central compliance functions such as the control room, registrations, responding to regulatory inquiries, and monitoring employee trading.

Audit. The Audit Department plays an indirect role in the supervisory process by periodically testing the firm’s supervisory and compliance controls and procedures and recommending changes in those procedures. In some firms, the Audit Department may also test systems for compliance with regulatory requirements.

Risk Management. The Risk Management function directly and indirectly supports the supervisory control function. Among the various functions are market risk management, operational risk management, review and approval of new business proposals, and review of large and unusual business transactions. By putting limits on the amount of capital that can be utilized in a particular business, on the amounts of risk that can be booked, and the controls necessary for new businesses and products, the risk management function plays an essential role in the overall control process of the firm.

Supervisory Control Group. Many firms have strengthened their supervisory programs by appointing teams of senior executives to focus solely on the supervisory responsibilities of the firm. These groups generally do not have specific business functions but devote their entire effort to supporting the managers in the performance of their supervisory responsibilities. While these groups were relatively rare five years ago, most large firms have established these groups in some form over the past few years. These groups differ in structure, size and
responsibilities, but they are all responsible to some degree for the following types of services.

First, the supervisory groups are generally responsible for working with the business managers, legal department, and the compliance department to develop, implement, and maintain the supervisory program for the business. Second, the groups sometimes share overall responsibility for regulatory supervision with the business managers and are generally responsible for ensuring that supervisory functions are performed adequately. Third, the supervisory groups are generally responsible for maintaining the documentation of the supervisory program and the individual supervisory tasks that are performed throughout the business, providing supervisors with appropriate tools and reports necessary to perform their supervisory responsibilities, and performing specific delegated supervisory tasks. Finally, the supervisory groups work closely with the business managers, the legal department and the compliance department to proactively identify potential compliance and regulatory risks and work to resolve these issues.

Supervisory and Compliance Program

The key to any successful supervisory program is the core compliance programs established by the firm. The success of the entire supervisory function is dependent on the quality and coverage of these programs.

Written Policies and Procedures. Written policies and procedures are critical to any supervisory control program. These include desk procedures, compliance manuals, compliance policies and procedures, and written supervisory procedures. The procedures must be clear, provide sufficient guidance to managers on the tasks that need to be completed, provide guidance as to the frequency of reviews, and provide for appropriate documentation of procedures. A simple “who, what, where, when, and how” analysis should be applied to all procedures to determine adequacy. The procedures should be risk based and geared toward the nature of the business. The key to drafting supervisory procedures is to craft a practical and useful guide that allows supervisors to fulfill their responsibilities with sufficient detail to cover the most critical rules and regulations. While the standard is generally “reasonable” supervisory procedures, the SEC and SROs hold firms to a much higher standard of almost strict liability. Even if a particular rule or regulation was not deemed to be a significant enough risk to the firm’s business to include in specific procedures, regulators may still find the supervisory procedures inadequate for not covering this rule. This is particularly true if there is an actual violation of the rule, no matter how minor, that could have been prevented with adequate supervision.

Supervisory procedures should generally consist of an overall supervisory plan that summarizes the overall firm approach to supervision and spells out the responsibilities of the various areas of the firm involved in supervision. There should be general supervisory procedures that are applicable to all managers, including provisions on employee trading, hiring and firing, monitoring electronic communications, and other general functions, as well as specific procedures applicable to the particular part of the business covered. Procedures should include supervisory checklists and other evidence of performance of tasks. Many firms have developed or acquired on-line tracking systems for the maintenance and recovery of supervisory task lists and reports. These systems are useful for monitoring compliance as well as establishing to the regulators that the supervisory control process has been followed. They can also act as a repository for surveillance and other reports reviewed by supervisors.

Training. An adequate training program is essential to good supervision. If the various employees of the firm, in particular the managers, do not know the applicable rules and regulations and the firm’s procedures to deal with these requirements, the employees have little chance of success. The training should target all employees on a periodic basis and all new employees at the time they arrive at the firm. Again, training programs should be specific to the type of business conducted by the firm and focus on high risk issues.

Surveillance and Monitoring. As noted, surveillance to detect potential violations of the rules is essential. Without adequate surveillance, the effectiveness of the supervisory program will be limited. Surveillance should be focused on databases that adequately capture the activity of the firm. The types
of reports and surveillance that will be necessary will depend on the nature of the firm’s business. Thorough analysis should be given to the types of surveillance reports the firm should produce.

**Ongoing Risk Assessment.** Many firms have created compliance risk assessment units that supplement the work of the Audit Department in assuring that the firm has adequate procedures in place to meet supervisory requirements. These units apply a risk-based analysis to review the various desks in the firm and make recommendations to improve the supervisory process. They are generally run in conjunction with the branch office examination program, but it is the responsibility of everyone involved in the supervisory process to identify and address ongoing risks to the firm. It also is useful to periodically look to outside consultants to review the supervisory process.

**Enforcement.** Once an issue is identified or a red flag uncovered, the firm needs adequate follow-up to make sure the issue is adequately addressed. This entails a plan of raising red flags to supervisors and to other control functions of the business, such as legal and compliance if necessary. In addition, there must be a method of tracking these referrals and assuring that appropriate action was taken to resolve the matter.

**Core Compliance Functions.** The Compliance Department is generally responsible for central compliance functions such as running the control room, handling registration issues, responding to regulatory inquiries, monitoring employee trading, and other general operations. These are critical functions that must be adequately resourced and staffed to assure compliance with the law.

**Infrastructure Requirements**

The base of any supervisory control function is the infrastructure that supports the process. This involves all of the front office and back office systems and operational support within the firm. Without an adequate platform, it is virtually impossible to maintain an effective supervisory control process. The major challenge is effectively incorporating these functions into the supervisory system.

**Data Management: Retention, Storage and Retrieval.** Data Management is an essential element of supervision and compliance. The securities business is based on the proper recording and storage of all aspects of customer service including customer orders, trade executions and the clearance and settlement of those trades. Without proper maintenance of records, effective surveillance, accurate regulatory reporting, and complete responses to regulatory examinations and inquiries would be virtually impossible. The failure to maintain appropriate books and records is a critical control failure.

The SEC has specific rules that identify the types of business records that must be maintained and the appropriate periods of time that those records must be maintained. Failure to maintain those records could result in regulatory fines and penalties, and the inability to defend against regulatory claims or civil litigation. The SEC requires that those records be maintained in WORM compliant format (Write Once Read Many). This requires a recordkeeping system that does not allow records to be altered, or if changes are allowed, tracks the changes and keeps copies of the earlier version of the documents and that allows for indexing and prompt recovery of documents. Firms must be compliant with these requirements and be able to recover specific documents on short notice.

The challenge facing any large firm is the proper capture and storage of these records from multiple front and back end systems that process trading and other activities for the firm. Substantial expenditures on the appropriate infrastructure are necessary to meet the requirements of these rules. The integrity of the data that is saved and maintained is necessary to the smooth functioning of the firm. Policies, procedures, and controls around this process are important to assure that the data is appropriately created, maintained and stored. To the extent that the same data is used for all three purposes, *i.e.*, regulatory storage, regulatory reporting and surveillance, the more integrated the supervisory system will be.

**Electronic Communications: Retention, Storage and Retrieval.** Storage of emails and other electronic communications has been in the forefront of the SEC investigations for many years. Firms are required to keep all written and electronic communications
including email, CHAT, Instant Messaging, and other forms of electronic communications for a three-year period. The SEC has levied significant penalties against firms for not complying with these retention requirements. A storage database provides the ability to supervise communication on an ongoing basis, and provides a resource for responding to regulatory inquires or litigation requests going forward. Currently, there are no general requirements to tape telephone conversations. If firms do maintain such tapes, however, they should establish some method of reviewing and supervising tapes.

**Systemic Compliance with Regulatory Requirements.** Systems used by broker-dealers in all aspects of their business must be built to comply with all regulatory requirements. The rapid pace of trading, the increasingly complex nature of the trading markets, and the evolving technology supporting that trading make this mandatory. Whereas in the past the compliance department could issue a bulletin and train employees on a particular aspect of the law, today many processes are completed from front to back without human intervention. If the system is not programmed correctly, the firm will not be in compliance with the rules. In order to manage this risk, supervisors and compliance must work closely with the IT department to be sure that regulations applicable to each system are properly identified, addressed, and subsequently tested to assure compliance.

There are four critical stages in this process. First, the regulatory requirements applicable to each type of system must be carefully documented and any IT development must take these requirements into consideration.

Second, at the earliest stages of development, IT must plan for regulatory requirements. Without this early attention, compliance and supervisory issues can be overlooked. At the very least, this will slow down development when the issue is raised at a later date. In the worst case scenarios, it could require redesigning the entire system, or lead to regulatory action if a regulator is the first to detect the problem.

The third stage is establishing an IT control program. Before the implementation of any significant new system or change to an existing system, there should be a method of testing that system against all applicable regulatory requirements. Some firms have established IT control committees to oversee this process and require signoff before changes are implemented.

The fourth stage is establishing an IT audit program. Firms should set up a process to periodically test the performance of systems against regulatory requirements to assure continued compliance. The schedule should be risk based, with high risk systems tested more frequently and lower risk systems tested less frequently. The test should be duplicative of the testing done before implementation of the new system or significant changes to an existing system. Any issues or problems identified by such testing should be fixed promptly.

**Operational Support.** Operational support is necessary for the proper processing, clearance and settlement of transactions. The firm should set up appropriate supervisory structures within the operations department to assure that these requirements are being properly met. Some firms have actually created supervisory teams in the operations area, similar to those in the front office business, to monitor and control this activity.

**Regulatory Reporting.** Regulatory reporting is a critical element of compliance with the securities rules and regulations. Regulators rely on reported data to monitor and supervise the activities in their respective markets. In the recent past, regulators have cracked down on firms that fail to file appropriate information or file incorrect or incomplete data. A set of supervisory procedures that ensures the proper preparation and filing of these reports is essential.

**Conclusion**

A strong supervisory control program over all aspects of the firm's business is essential to continued business success in the new technological and regulatory environments. Systemic controls and data management programs are increasingly important to these controls. Wall Street is littered with failed firms that did not grasp this concept until it was too late. Individual executives of firms have also suffered severe consequences, including in some cases fines, suspension and bars from the industry. In hindsight, it is clear
that greater attention to supervisory and compliance requirements could have prevented many of these cases from developing into major problems. Over time, firms that fully embrace the concept of comprehensive supervisory control should do better financially and continue to be the leaders of the financial industry.

NOTES

1. Section 15(b)(4)(E) of the Securities and Exchange Act of 1934 requires broker-dealers to adopt procedures and a system for applying such procedures “which would reasonably be expected to prevent and detect, insofar as practicable, any [such] violation . . . “. NASD Rule 3010(a) requires members to “establish and maintain a system to supervise the activities of [associated persons] that is reasonably designed to achieve compliance with applicable securities laws and regulations, and with applicable NASD Rules.” NYSE Rule 342(a) requires that “each office, department, or business activity of a member or member organization…shall be under the supervision and control of the member…establishing it and of the personnel delegated such authority and responsibility…The person in charge of a group of employees shall reasonably discharge his duties and obligations in connection with supervision and control of the activities of those employees related to the business of their employer and compliance with the securities laws and regulations.”


3. Id. Regulation NMS has four major provisions: (1) Rule 610, which requires equal access to markets; (2) Rule 611, which prohibits trade-throughs in electronic markets; (3) Rule 612, which prohibits subpenny pricing; and (4) amendments to joint industry plans and rules regarding dissemination of market data.


5. Id.


10. NYSE Exchange Hearing Panel Decisions 05-142 to 05-160, and 06-014 (January 30, 2006).


