

practices within their line of business are consistent with firm-wide policies and procedures to support the management and measurement of the institution's operational risk.

Line of business management is responsible for both managing operational risk within the business lines and ensuring that policies and procedures are consistent with and support the firm-wide operational risk framework. Management should ensure that business-specific policies, processes, procedures and staff are in place to manage operational risk for all material products, activities, and processes. Implementation of the operational risk framework within each line of business should reflect the scope of that business and its inherent operational complexity and operational risk profile. Line of business management must be independent of both the firm-wide operational risk management and the testing and verification functions.

## VI. Operational Risk Management Elements

The operational risk management framework provides the overall operational risk strategic direction and ensures that an effective operational risk management and measurement process is adopted throughout the institution. The framework should provide for the consistent application of operational risk policies and procedures throughout the institution and address the roles of both the independent firm-wide operational risk management function and the lines of business. The framework should also provide for the consistent and comprehensive capture of data elements needed to measure and verify the institution's operational risk exposure, as well as appropriate operational risk analytical frameworks, reporting systems, and mitigation strategies. The framework must also include independent testing and verification to assess the effectiveness of implementation of the institution's operational risk framework, including compliance with policies, processes, and procedures.

In practice, an institution's operational risk framework must reflect the scope and complexity of business lines, as well as the corporate organizational structure. Each institution's operational risk profile is unique and requires a tailored risk management approach appropriate for the scale and materiality of the risks present, and the size of the institution. There is no single framework that would suit every institution; different approaches will be needed for different

institutions. In fact, many operational risk management techniques continue to evolve rapidly to keep pace with new technologies, business models and applications.

The key elements in the operational risk management process include:

- Appropriate policies and procedures;
- Efforts to identify and measure operational risk;
- Effective monitoring and reporting;
- A sound system of internal controls; and
- Appropriate testing and verification of the operational risk framework.

### A. Operational Risk Policies and Procedures

#### Supervisory Standards

S 8. The institution must have policies and procedures that clearly describe the major elements of the operational risk management framework, including identifying, measuring, monitoring, and controlling operational risk.

Operational risk management policies, processes, and procedures should be documented and communicated to appropriate staff. The policies and procedures should outline all aspects of the institution's operational risk management framework, including:

- The roles and responsibilities of the independent firm-wide operational risk management function and line of business management;
- A definition for operational risk, including the loss event types that will be monitored;
- The capture and use of internal and external operational risk loss data, including large potential events (including the use of scenario analysis);
- The development and incorporation of business environment and internal control factor assessments into the operational risk framework;
- A description of the internally derived analytical framework that quantifies the operational risk exposure of the institution;
- An outline of the reporting framework and the type of data/information to be included in line of business and firm-wide reporting;
- A discussion of qualitative factors and risk mitigants and how they are incorporated into the operational risk framework;
- A discussion of the testing and verification processes and procedures;
- A discussion of other factors that affect the measurement of operational risk; and

- Provisions for the review and approval of significant policy and procedural exceptions.

### B. Identification and Measurement of Operational Risk

The result of a comprehensive program to identify and measure operational risk is an assessment of the institution's operational risk exposure. Management must establish a process that identifies the nature and types of operational risk and their causes and resulting effects on the institution. Proper operational risk identification supports the reporting and maintenance of capital for operational risk exposure and events, facilitates the establishment of mechanisms to mitigate or control the risks, and ensures that management is fully aware of the sources of emerging operational risk loss events.

### C. Monitoring and Reporting

#### Supervisory Standards

S 9. Operational risk management reports must address both firm-wide and line of business results. These reports must summarize operational risk exposure, loss experience, relevant business environment and internal control assessments, and must be produced no less often than quarterly.

S 10. Operational risk reports must also be provided periodically to senior management and the board of directors, summarizing relevant firm-wide operational risk information.

Ongoing monitoring of operational risk exposures is a key aspect of an effective operational risk framework. To facilitate monitoring of operational risk, results from the measurement system should be summarized in reports that can be used by the firm-wide operational risk and line of business management functions to understand, manage, and control operational risk and losses. These reports should serve as a basis for assessing operational risk and related mitigation strategies and creating incentives to improve operational risk management throughout the institution.

Operational risk management reports should summarize:

- Operational risk loss experience on an institution, line of business, and event-type basis;
- Operational risk exposure;
- Changes in relevant risk and control assessments;
- Management assessment of early warning factors signaling an increased risk of future losses;
- Trend analysis, allowing line of business and independent firm-wide operational risk management to assess