



**Internal Control —
Integrated Framework**

**Guidance on Monitoring
Internal Control Systems**

Volume I — Executive Summary

June 2008

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Committee of Sponsoring Organizations of the Treadway Commission

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From the Chairman ...

Monitoring is an important component of the 1992 COSO *Internal Control — Integrated Framework* (the COSO Framework). The development of this guidance on monitoring — which represents the concerted effort of the Grant Thornton team, a COSO task force, and the COSO Board — is rooted in the COSO Board's strong sense that the monitoring component of the Framework is not fully understood or utilized. The Board believes that proper implementation of monitoring can assist greatly in organizations achieving the dual objectives of improving internal control while reducing the costs of gaining continued assurance that internal control operates effectively.

We previously published a discussion document — downloaded more than 31,000 times — that addressed the theory of monitoring. The response to it was positive, and we received a number of constructive comments from around the world that are posted at www.coso.org/guidance.htm. The project team and Board reviewed all of the comments and made a number of changes to the document that we believe improve the understanding of monitoring. We are issuing this exposure draft because it contains new material — including a third volume comprising examples of effective monitoring and three in-depth illustrations.

This document differs from the earlier discussion document in a number of ways, including:

- A document structure that includes both the theoretical concepts of monitoring and easily identified practical application guidance;
- A comprehensive framework for implementing effective monitoring that is more clearly linked to risks that controls are expected to mitigate;
- A clearer articulation of the differences between direct and indirect information used for monitoring and greater clarity as to how indirect information can be utilized;
- Examples of how monitoring can occur within computerized applications, as well as over computer applications; and
- A clearer exposition of monitoring as a unifying component of the COSO Framework, including its use in establishing whether internal control is effective.

We have provided a 75-day exposure period during which you may submit comments. We learn a great deal from your comments and are anxious to hear from you. Accordingly, we have developed an easy online feedback form for you to complete and will consider your observations in the development of our final guidance. A link to the form is located at <http://www.coso.org/guidance.htm>. *Please submit your comments by August 15, 2008.* We intend to issue the final guidance this fall. In the meantime, we hope you gain value from this version of the document.

Larry E. Rittenberg, PhD, CPA, CIA
Chair, COSO

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I. Purpose of the Guidance

1. The Committee of Sponsoring Organizations of the Treadway Commission (COSO) introduced the *Internal Control — Integrated Framework* (the COSO Framework) in 1992. Much has happened since the initial release. Most notably, some countries have implemented regulations requiring certain companies to publicly report on the effectiveness of internal control.
2. COSO's Guidance on Monitoring Internal Control Systems (COSO's Monitoring Guidance) elaborates on the monitoring component of internal control discussed in the 1992 COSO Framework and in the subsequent *Internal Control over Financial Reporting – Guidance for Smaller Public Companies* issued in 2006 (COSO's 2006 Guidance). This guidance on monitoring does not change any of the fundamental elements of the COSO Framework or COSO's 2006 Guidance.
3. COSO initiated this project based on observations that many organizations were not fully utilizing the monitoring component of internal control. This fact became most clear as COSO witnessed the efforts of many companies to meet certain internal control assertion requirements around the world.
4. COSO observed that some organizations had effective monitoring in certain areas, but were under-utilizing the results of that monitoring to support their conclusions about the effectiveness of internal control. Instead, they were adding redundant (often unnecessary) internal control evaluation procedures designed to test controls for which management — through its existing monitoring efforts — already had sufficient support. Other organizations were not making the best use of ongoing monitoring procedures, or lacked necessary monitoring procedures altogether, which forced them to implement inefficient year-end evaluations to support their conclusions as of the end of the fiscal year.
5. The objectives of COSO's Monitoring Guidance are two-fold:
 - *To help organizations improve the effectiveness and efficiency of their internal control¹ systems.* The COSO Framework emphasizes that organizations with effective internal control systems monitor the effectiveness of those systems over time² — just as a manufacturing organization monitors the continued effectiveness of its manufacturing procedures. This guidance is designed to help organizations recognize and

¹ Throughout this document, we use the term “controls” and “internal controls” to refer to all of the components of the internal control framework, i.e., the term is used to reference more than just the control activities component.

² COSO Framework, p. 69.

maximize the use of monitoring when it is effective and enhance monitoring in areas where improvement may be warranted.

- *To provide practical guidance that illustrates how monitoring can be incorporated into an organization’s internal control processes.* The “Applying the Concepts” sections in Volume II of the guidance provide easy reference points — demonstrating how organizations might apply the general concepts of monitoring. Volume III goes further by providing a variety of monitoring examples from organizations interviewed during the project.

6. This guidance is designed to apply to all three objectives addressed in the COSO Framework: the effectiveness and efficiency of operations, the reliability of financial reporting, and compliance with applicable laws and regulations. However, recognizing that its primary application may be related to monitoring internal control over financial reporting (ICFR), most of the examples concentrate on the financial reporting objective.

II. Nature and Purpose of Monitoring

7. The COSO Framework states that “monitoring ensures that internal control continues to operate effectively.”³ COSO’s 2006 Guidance enhances the understanding of monitoring by articulating the following two related principles:

- Ongoing and/or separate evaluations enable management to determine whether the other components of internal control⁴ continue to function over time.
- Internal control deficiencies are identified and communicated in a timely manner to those parties responsible for taking corrective action and to management and the board as appropriate.

8. COSO’s Monitoring Guidance builds on those two fundamental principles.

9. Monitoring can refer to ongoing or separate evaluations of internal control operation. Further, an organization’s evaluation of controls to determine that they are properly implemented — even for the first time — is a form of monitoring. The results of an initial evaluation should result in a baseline understanding of the effectiveness of controls that can be monitored in the future.

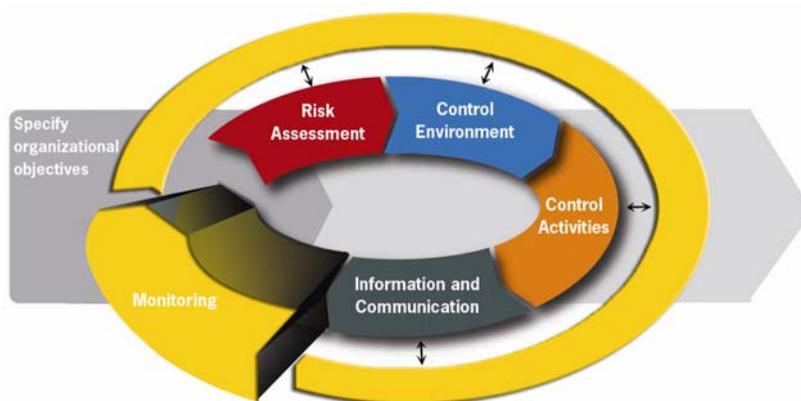
³ COSO Framework, p. 69.

⁴ COSO’s 2006 Guidance refers specifically to internal control over financial reporting, but the concepts can be applied to any internal control objective.

10. The COSO Framework recognizes that risks change over time and that there is a need for management to “determine whether the internal control system continues to be *relevant* and able to *address new risks*” (p.69, emphasis added). Thus, monitoring should (1) assess whether management reconsiders the design of controls when risks change, and (2) verify the continued operation of existing controls that have been designed to reduce risks to an acceptable level. Accordingly, this guidance continues to emphasize COSO’s belief that monitoring should be based on a fundamental analysis of risks and an understanding of how controls may or may not manage or mitigate those risks.

11. An overview of the framework and how its components work together is shown in Figure 1, which is an enhancement of the process approach to internal control developed in COSO’s 2006 Guidance. The enhancements include the explicit recognition that monitoring:

- Relates to all three internal control objectives, not just to financial reporting objectives, and
- Evaluates the internal control system’s ability, in its entirety, to manage or mitigate *meaningful risks*⁵ to organizational objectives. Monitoring does not seek to conclude on the effectiveness of individual internal control components operating in isolation.



The COSO Monitoring Process
Figure 1

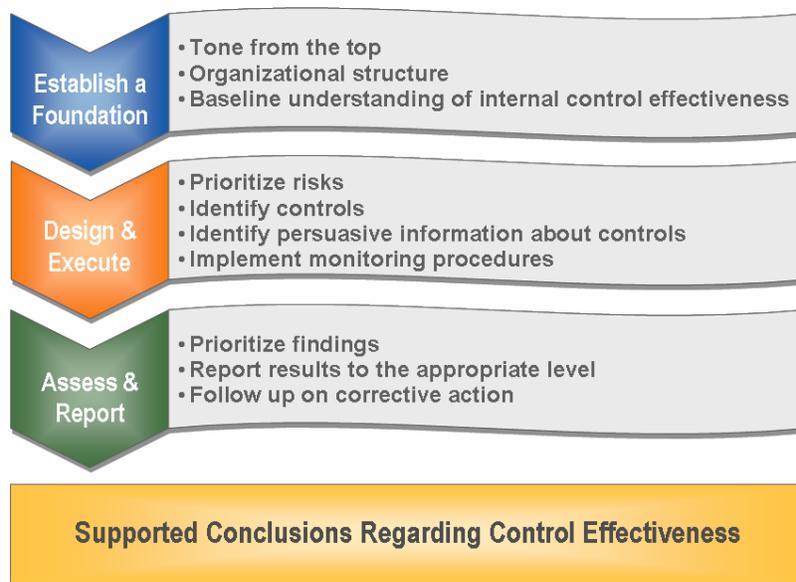
12. Each of the five components of internal control set forth in the COSO Framework is important to achieving an organization’s objectives. However, the fact that each component must be present and functioning does not mean that each must function perfectly. A deficiency in one component might be mitigated by

⁵ “Meaningful risks” are those that might reasonably have a consequential effect on an organizational objective.

other controls in that component or another component that are strong enough to reduce the risk of internal control failure to an acceptable level.

III. A Model for Monitoring

13. Monitoring involves (1) establishing a foundation for monitoring, (2) designing and executing monitoring procedures that are prioritized based on risk, and (3) assessing and reporting the results, including following up on corrective action where necessary (see Figure 2).



The Monitoring Process
Figure 2

Establishing a Foundation for Monitoring

14. Planning and organizational support form the foundation for monitoring, which includes (1) a tone from the top about the importance of internal control (including monitoring), (2) an organizational structure that considers the roles of management and the board in regard to monitoring and the use of **evaluators**^{6,7} with appropriate capabilities, objectivity and authority, and (3) a baseline understanding of internal control effectiveness.

⁶ See the Glossary in Volume II for definitions of terms set in boldface.

⁷ Evaluators are individuals, including (but not limited to) management, line personnel, internal auditors and board members, who are responsible for monitoring internal control at various levels throughout an organization.

Tone from the Top

15. As with every internal control component, the ways in which management and the board express their beliefs about the importance of monitoring have a direct impact on its effectiveness. Management's tone influences the way employees conduct and react to monitoring. Likewise, the board's tone influences the way management conducts and reacts to monitoring.

Organizational Structure

16. *Role of Management and the Board* — Management has the primary responsibility for the effectiveness of an organization's internal control system. Management establishes the system and makes sure that it continues to operate effectively. Controls performed below the senior-management level can be monitored by management personnel or their objective designees. However, controls performed directly by members of senior management cannot be monitored *objectively* by those individuals or their designees. In such circumstances, other members of senior management may be able to monitor the controls. For example, the chief legal officer might monitor controls over new corporate contracts entered into by the chief operating officer. The board may also need to monitor such controls, which it frequently accomplishes through an audit committee and an internal audit function. Board-level monitoring becomes increasingly important regarding controls that are at risk of senior-management override.

17. In most cases, the board is ultimately responsible for determining whether management has implemented effective internal control (including monitoring). It makes this assessment by (1) understanding the risks the organization faces, and (2) gaining an understanding of how senior management manages or mitigates those risks that are meaningful to the organization's objectives. Obtaining this understanding includes determining how management supports its beliefs about the effectiveness of the internal control system in those important areas.

18. *Characteristics of Evaluators* — Monitoring is conducted by evaluators who are appropriately **competent** and **objective** in the given circumstances. Competence refers to the evaluator's knowledge of the controls and related processes, including how controls should operate and what constitutes a control deficiency. The evaluator's objectivity refers to the extent to which he or she can be expected to perform an evaluation with no concern about possible personal consequences and no vested interest in manipulating the information for personal benefit or self-preservation.

19. Individuals who are directly involved in the execution or oversight of certain controls typically have knowledge readily available about the effective operation

of those controls. This direct involvement can provide all or the majority of the support an individual needs to conclude personally on the effectiveness of internal control. However, to the extent that others, such as more-senior personnel or external parties, also need to conclude on the effectiveness of internal control, more-objective personnel may need to be involved in the monitoring process. Volume II of this guidance discusses the varying levels of objectivity provided through self review, peer review, supervisory review and impartial review.

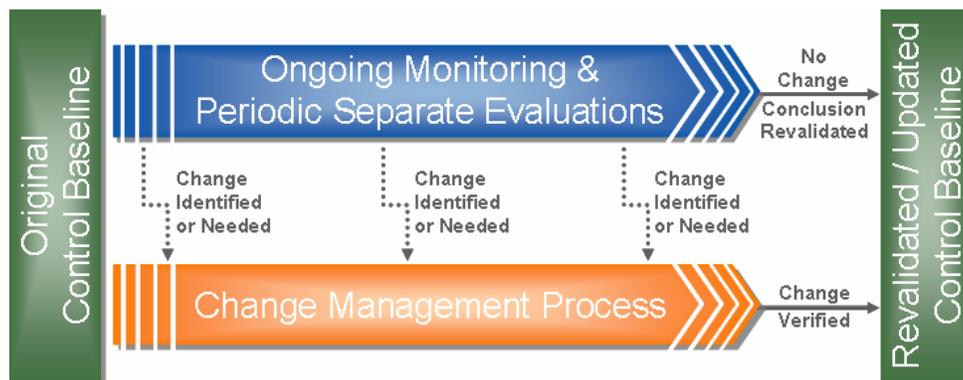
Baseline Understanding of Internal Control Effectiveness

20. Monitoring starts with a supported understanding of the internal control system's design and of whether controls have been implemented to accomplish the organization's internal control objectives. As management gains experience with monitoring, its baseline understanding will expand based on results of monitoring. If an organization does not already have such a baseline understanding in an area with meaningful risks, it will need to perform an initial, and perhaps extensive, evaluation of the design of internal control and determine whether appropriate controls have been implemented.

21. Previously effective internal control systems become ineffective for one of two reasons:

- The environment changes without corresponding controls adjustments, rendering the existing controls unable to address new or altered risks, or
- The operation of the internal control system changes such that it no longer adequately manages or mitigates existing risks.

22. An established baseline understanding of internal control effectiveness provides an appropriate starting point for more-effective and more-efficient monitoring — monitoring that focuses on identifying changes either in the environment or in the internal control system and on the organization's ability to manage those changes properly (see Figure 3).



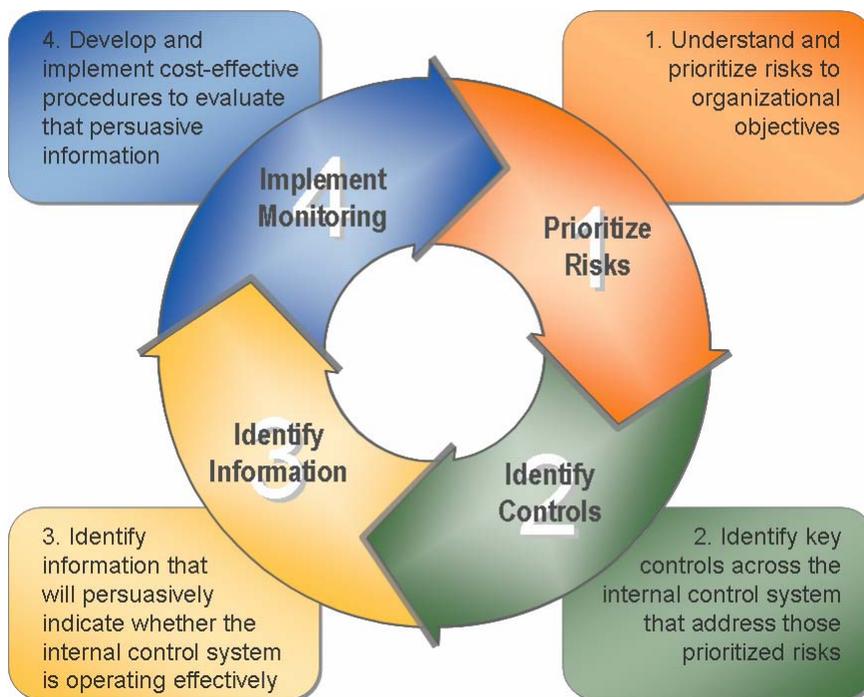
Monitoring for Change Continuum

Figure 3

23. When ongoing-monitoring or separate-evaluation procedures identify a change in the environment, the organization determines whether a corresponding change is needed in the internal control system. When monitoring identifies a change in the internal control system, the organization needs to verify whether that change was designed and implemented properly.

Designing and Executing Monitoring Procedures

24. The core of effective and efficient monitoring lies in designing and executing monitoring procedures that evaluate *important* controls over *meaningful* risks to the organization’s objectives. Figure 4 presents a model that may help in designing and implementing the monitoring component. The model reiterates the importance of understanding risks, and the relationship of controls to risks, as a fundamental part of the COSO Framework.



Monitoring Design & Implementation Progression

Figure 4

25. Designing monitoring begins with understanding and prioritizing the risks to achieving important organizational objectives. Prioritizing risks helps identify which risks are meaningful enough to subject to control monitoring. Depending on the purpose of the monitoring, this process might identify different risks at different organizational levels. For example, monitoring of controls that prevent theft of

Prioritize Risks

supplies might be meaningful to a store manager, but might not warrant the individual attention of the Chief Executive Officer (CEO).

26. Risk prioritization is a natural part of the risk assessment component of internal control. Its inclusion here is not meant to imply the necessity of a separate risk assessment function dedicated solely to support of the monitoring function. In a properly operating internal control system, the risk assessment component will routinely identify and prioritize risks to the organization's objectives. The resulting information will then influence decisions regarding the type, timing, and extent of monitoring.

27. The next step is to determine the controls that are important in managing or mitigating the identified meaningful risks.

28. Important controls — often referred to as **key controls** — are those that are most important to monitor in order to support a conclusion about the internal control system's ability to operate effectively. They often have one or both of the following characteristics:

Identify
2
Controls

- Their failure might materially affect the organization's objectives, yet not reasonably be detected in a timely manner by other controls, and/or
- Their operation might prevent other control failures or detect such failures before they have an opportunity to become material to the organization's objectives.

29. Identifying key controls helps ensure that the organization devotes monitoring resources where they can provide the most value.

30. Once key controls are noted, evaluators identify the information that will support a conclusion about whether those controls have been implemented and are operating as designed. Identifying this information entails knowing how control failure might occur and what information will be **persuasive** in determining whether the control system is or is not working properly.

Identify
3
Information

31. The identification of persuasive information allows the organization to determine which monitoring procedures to employ (i.e., ongoing monitoring or separate evaluations), as well as the frequency with which the monitoring procedures should take place.

Implement
4
Monitoring

Persuasive Information

32. To be effective, monitoring must evaluate a **sufficient** amount of **suitable** information. Suitable information is **relevant**, **reliable**, and **timely** in the given circumstances. Sufficient suitable information provides the evaluator with the support needed to conclude on the internal control system's ability to manage or

mitigate identified risks. This guidance refers to information that meets these conditions as “persuasive.”

33. One of the most important aspects of suitability (and, thus, of persuasive information) is the distinction between **direct** and **indirect information**. Direct information substantiates the operation of controls and is obtained by observing controls in operation, reperforming them, or otherwise testing their operation directly. It can be useful in both ongoing monitoring and separate evaluations. Generally, direct information is highly relevant because it provides an unobstructed view of control operation.

34. Indirect information is all other information used to infer whether controls or control components continue to operate effectively. It either relates to or is produced by the process in which the controls reside. Indirect information might include, but is not limited to, (1) operating statistics, (2) **key risk indicators**, (3) **key performance indicators**, and (4) comparative industry metrics.

35. Direct information usually involves some testing, observation, or examination of documents that provides evidence that controls are operating as designed. Indirect information, on the other hand, requires the evaluator to make *an inference* about the effective operation of controls based on the presence or lack of anomalies in the data. For example, an evaluator may observe that an organization’s gross profit for a particular product line has not changed from prior periods and is on budget. Should that individual conclude that the controls over inventory management and sales continue to work effectively? If so, under what conditions would it be proper to make such an inference? Does it matter how long it has been since the organization last gathered direct information on the effectiveness of those controls? Does it matter whether factors are present that increase the risk that the controls may not be effective, such as a change in the processing system or a change in management incentives? Does it matter whether the monitoring is performed using ongoing monitoring or separate evaluation procedures?

36. Clearly, all of these factors are important in assessing the level of persuasiveness attributable to any quantity of indirect information. COSO’s Monitoring Guidance seeks to help organizations consider such factors in designing effective and efficient monitoring procedures.

Approaches and Frequency

37. With the risks prioritized, key controls noted, and available persuasive information identified, the organization implements monitoring procedures that evaluate the effectiveness of the internal control system’s ability to manage or mitigate the identified risks. Monitoring involves the use of **ongoing monitoring**

procedures and/or **separate evaluations** to gather and analyze persuasive information supporting conclusions about the effectiveness of internal control across all five COSO components.

38. The COSO Framework makes an important point regarding building monitoring into the normal operations of an organization:

“An entity that perceives a need for frequent separate evaluations should focus on ways to enhance its ongoing monitoring activities, and, thereby, to emphasize ‘building in’ versus ‘adding on’ controls.”⁸

39. COSO’s Monitoring Guidance builds on that concept by further differentiating ongoing and separate-evaluation monitoring procedures. Ongoing monitoring occurs when the normal operations of an organization provide feedback — through both direct and indirect information — to risk owners about the effectiveness of the internal control system. It includes regular management and supervisory activities, peer comparisons and trend analysis using internal and external data, reconciliations, and other routine actions. Ongoing monitoring might also include automated tools that electronically evaluate controls and/or transactions.

40. Because they are performed routinely, often on a real-time basis, ongoing monitoring procedures can offer the first opportunity to identify and correct control deficiencies. When external reporting requirements exist, management may design ongoing monitoring such that it provides the majority of evidence management needs to support its assertions, possibly reducing the extent of year-end, separate evaluations whose sole purpose is to support the external assertions.

41. Separate evaluations can employ the same techniques as ongoing monitoring, but they are designed to evaluate controls periodically and are not ingrained in the daily operations of the organization. They do, however, play an important role in monitoring in that they often provide:

- A more objective analysis of control effectiveness than ongoing monitoring procedures that are often performed by less objective personnel, and
- Periodic feedback regarding the effectiveness of ongoing monitoring procedures.

42. When ongoing monitoring is effective, periodic separate evaluations are used as necessary to reconfirm the conclusions reached through ongoing monitoring.

⁸ COSO Framework, p. 70.

Separate evaluations are also used to address controls that are not subject to ongoing monitoring.

43. As the potential impact and/or likelihood of a control's failure increases, the length of time between separate evaluations typically decreases. Conversely, as risk decreases, organizations may determine to increase the time between separate evaluations.

Assessing and Reporting Results

44. The monitoring process is complete when the results are compiled and reported to appropriate personnel. This final stage enables the results of monitoring to either confirm previously established expectations about the effectiveness of internal control or highlight identified deficiencies for possible corrective action.

Prioritizing and Communicating Results

45. Identifying and prioritizing potential control deficiencies allows organizations to determine (1) the levels to which the potential deficiencies should be reported, and (2) the corrective action, if any, that should be taken. Several factors may influence an organization's prioritization of identified deficiencies, including:

- The likelihood that the deficiency will result in an error,
- The effectiveness of other, **compensating controls**,
- The potential effect of an identified deficiency on organizational objectives,
- The potential effect of the deficiency on other objectives, and
- The aggregating effect of multiple deficiencies.

Reporting Internally

46. Reporting protocols vary depending on the purpose for which the monitoring is conducted and the severity of the deficiencies. Typically, the results of monitoring conducted for purposes of evaluating an organization's entity-wide objectives are reported to senior management and the board. Examples include monitoring of internal control over financial reporting or monitoring of controls over operations that are material to the organization's profitability.

47. Some monitoring, however, is conducted for purposes that might be material only to a small part of an organization, e.g., a small subsidiary's operational monitoring to meet local goals that are not material to the consolidated company. Identified deficiencies in this case might have "higher likelihood" and "higher

significance” relative to the subsidiary’s objectives, but not to the overall organization’s. In such situations, reporting might be limited to local management personnel for whom the local goals are important.

48. In any case (except, perhaps, where fraud is suspected), control deficiencies should be reported to the person directly responsible for the control’s operation and to management that has oversight responsibilities and is at least one level higher. Reporting at least to these two levels gives the responsible person the information necessary to correct control operation and also helps ensure that appropriately objective people are involved in the severity assessment and follow-up. At some point, deficiencies may become severe enough to warrant discussion with the board. Management and the board may wish to discuss in advance the nature and severity of deficiencies that should be reported to that level.

49. In situations where fraud is suspected, reporting may not occur to the person directly responsible for the control’s operation. It should occur to higher levels, including to senior management and the board as appropriate.

Reporting Externally

50. A properly designed and executed monitoring program helps support external assertions because it provides persuasive information that internal control operated effectively at a point in time or during a particular period.

51. The presence of external assertion requirements may affect the type, timing, and extent of monitoring an organization decides to perform. Therefore, organizations that are required to report to third parties on the effectiveness of their internal control system may design and execute monitoring activities differently than entities that are not required to report.

52. External reports that assert as to the effectiveness of an internal control system may need to withstand scrutiny by outsiders who (1) do not have management’s implicit knowledge of controls, and (2) require enough persuasive information to form their own opinions about the effectiveness of internal control. As a result, an organization may find it helpful to compare the scope of its monitoring program with the needs of external parties, such as auditors and regulators, to ensure that all parties understand and agree on the general requirements. In addition, the organization might be able to enhance the efficiency of external parties’ work by directing them to portions of the organization’s monitoring procedures that they might use, or by making modifications to its monitoring program to better facilitate external parties’ work. Such modifications might include:

- Using evaluators with a higher degree of objectivity in certain areas if doing so will enhance the ability of the external party to use their work;

- Increasing the use of direct information in monitoring of certain areas if doing so will enable the external party to more effectively and efficiently support its own conclusions; and
- Increasing the formality of documentation in order to improve the external party's ability to understand and evaluate internal control.

Scalability of Monitoring

53. Many factors can influence the type, timing, and extent of an organization's monitoring. Two factors that warrant special mention are organizational size and complexity.

Scalability Based on Size

54. Organizational size affects the design and conduct of monitoring. In most large organizations, neither senior management nor the board is in close proximity to the operation of many controls. As a result, they often rely on monitoring procedures performed by other personnel through successive levels of management. These procedures are built into the day-to-day, ongoing monitoring activities that operate at each level of the organization, all of which "roll up" to a home office or headquarters, and are typically augmented by separate evaluations performed by a qualified internal audit function or other parties (e.g., lower-level management or other departments). These periodic separate evaluations lend support to the conclusion that the lower-level monitoring systems are operating effectively.

55. In smaller organizations, on the other hand, monitoring at the senior-management level often occurs much closer to the risk and related controls, giving the evaluators more implicit knowledge of the operation of controls. This increase in implicit knowledge about the operation of internal control may allow the evaluator in a smaller organization to support his or her control conclusions through less-intense monitoring than would be necessary in a larger organization where the evaluator is further removed from the operation of controls.

Scalability Based on Complexity

56. Size notwithstanding, some organizations are more complex than others. Factors influencing complexity include industry characteristics, regulatory requirements, number of products or service lines, level of centralization versus decentralization, use of prepackaged versus customized software, or the presence of certain types of transactions (e.g., complex capital structures, derivative transactions, or acquisitions).

57. Because the level of complexity may vary by department or area, scaling of monitoring based on complexity is more difficult to apply to an entire organization than is scaling based on size. An organization may use a prepackaged information system, reducing IT risk (when configured correctly), but that same organization might enter into complex derivative contracts, increasing accounting risk.

58. Level of complexity generally correlates with level of risk. Accordingly, in areas of greater organizational complexity, one would expect more-intense monitoring using direct information. In contrast, in areas of lesser complexity, ongoing monitoring using indirect information, along with periodic confirmation through separate evaluations that use direct information, might be appropriate.

59. Clearly, any model for monitoring — if it is to remain effective *and* efficient — must recognize the variables that affect monitoring and be able to adapt to them as necessary. This implies that monitoring is not one-size-fits-all. Rather, it is applied uniquely to fit each organization’s risk profile and internal control structure.

IV. Overview of Volume III — Application Techniques

60. Volume III of the guidance presents practical examples and illustrations of applying monitoring across many control situations. The project team took two approaches in developing the example material:

1. Interviews with numerous organizations of varying size, complexity, industries, and geography to identify specific examples of effective monitoring.
2. In-depth reviews of the entire monitoring component at two organizations — a large retail chain-store company and a medium-sized manufacturing company. These in-depth reviews considered how those organizations monitor controls and sought to identify ways in which monitoring might be improved — either in its effectiveness or efficiency, or in both.

V. Summary Considerations Regarding Effective Monitoring

61. Properly designed and executed monitoring (1) provides persuasive information to the right people regarding the internal control system’s effectiveness, and (2) identifies and communicates internal control deficiencies in a timely manner to those parties responsible for taking corrective action and to management and the board as appropriate. In doing so, it facilitates the correction of control deficiencies *before* they materially affect the achievement of the organization’s objectives.

62. Each organization should consider its optimal approach to monitoring, reflecting, perhaps, on the following:

1. Many organizations are performing effective monitoring in certain areas, but are not fully utilizing the results of that monitoring to support their conclusions about the effectiveness of the internal control system.
2. Monitoring considers how the *entire* internal control system addresses meaningful risks, not how individual control activities operate in isolation, without regard to the level of risk and the effectiveness of other elements of the internal control system.
3. Monitoring works best when management approaches it proactively, establishing a baseline understanding of internal control effectiveness and an information system that alerts it to changes in internal control processes or risks that affect the need to change or add controls.
4. The board has important responsibilities in monitoring internal control (especially the controls that relate to ensuring a strong tone from the top) and in mitigating the risk of management override.
5. Internal audit, through added skills and objectivity, can play an important role in assisting management and the board in monitoring, especially as organizations grow in size and complexity.
6. Organizations should follow a systematic process in determining “what” and “how” to monitor. That process is developed in this guidance and starts with identifying and prioritizing the risks that are being mitigated by effective internal controls.
7. Judgment is required in determining both (a) the optimal approach to monitoring, and (b) the effectiveness of monitoring.
8. Monitoring generally includes the use of both direct and indirect information. However, indirect information can be used only for a finite period of time without some direct evidence that the underlying control is operating effectively.
9. Monitoring can be performed using either “ongoing” monitoring activities or “separate evaluations.” Most organizations will use a combination of both approaches, but ongoing monitoring using appropriately persuasive information is often most effective and efficient.
10. Computerized applications have undergone substantial development and can be built into, or added onto, existing computer applications, providing a high degree of continuous monitoring.

