

**A Framework for Evaluating  
Control Exceptions and Deficiencies**

**Version 3**

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## **Introduction and Purpose**

This paper outlines a suggested framework for evaluating exceptions and deficiencies resulting from the evaluation of a company's internal control over financial reporting. Issuers and auditors may find this framework useful.

This paper should be read in conjunction with Auditing Standard No. 2, *An Audit of Internal Control Over Financial Reporting Performed in Conjunction With an Audit of Financial Statements* (AS 2), especially the definitions in paragraphs 8 through 10, the section on evaluating deficiencies in paragraphs 130 through 141, the examples of significant deficiencies and material weaknesses in Appendix D, and the Background and Basis for Conclusions in Appendix E. The framework is not a substitute for AS 2 and other relevant professional literature.

The framework was developed by representatives of the following nine firms:

BDO Seidman LLP  
Crowe Chizek and Company LLC  
Deloitte & Touche LLP  
Ernst & Young LLP  
Grant Thornton LLP  
Harbinger PLC  
KPMG LLP  
McGladrey & Pullen LLP  
PricewaterhouseCoopers LLP

In addition, William F. Messier, Jr., Professor, Georgia State University, also contributed to the development of the framework.

This framework reflects their views on a framework consistent with their understanding of AS 2.

The framework represents a thought process that will require significant judgment. The objective of the framework is to assist knowledgeable and experienced individuals in evaluating deficiencies in a consistent manner. The mere mechanical application of this framework will not, in and of itself, necessarily lead to an appropriate conclusion. Because of the need to apply judgment and to consider and weigh quantitative and qualitative factors, different individuals evaluating similar fact patterns may reach different conclusions.

The framework recognizes the requirement in AS 2 to consider likelihood and magnitude in evaluating deficiencies. It also recognizes that AS 2.136 states:

In evaluating the magnitude of the potential misstatement, the auditor should recognize that the maximum amount that an account balance or total of transactions can be overstated is generally the recorded amount. However, the recorded amount is not a limitation on the amount of potential understatement. The auditor also should

recognize that the risk of misstatement might be different for the maximum possible misstatement than for lesser possible amounts.

The framework applies these concepts through the evaluation of a combination of magnitude and likelihood. Because of the wide variety of control types, population characteristics, and test exception implications, the group did not undertake to develop a purely quantitative model. Instead, the framework considers quantitative and qualitative factors.

This paper does not address the determination of materiality. Reference, in that regard, should be made to AS 2.23, which states:

The same conceptual definition of materiality that applies to financial reporting applies to information on internal control over financial reporting, including the relevance of both quantitative and qualitative considerations.\*

- The quantitative considerations are essentially the same as in an audit of financial statements and relate to whether misstatements that would not be prevented or detected by internal control over financial reporting, individually or collectively, have a quantitatively material effect on the financial statements.
- The qualitative considerations apply to evaluating materiality with respect to the financial statements and to additional factors that relate to the perceived needs of reasonable persons who will rely on the information. AS 2.6 describes some qualitative considerations.

\* AU sec. 312, *Audit Risk and Materiality in Conducting an Audit*, provides additional explanation of materiality.

## Guiding Principles

The principles set forth below correspond to the box numbers on the appropriate charts included in this paper.

The evaluation of individual exceptions and deficiencies is an iterative process. Although this paper depicts the evaluation process as a linear progression, it may be appropriate at any point in the process to return to and reconsider any previous step based on new information.

In applying the framework, the following should be considered in determining which chart(s) to use for evaluating individual exceptions and deficiencies:

- Chart 1 is used to evaluate and determine whether an exception noted in performing tests of operating effectiveness represents a control deficiency.
- Chart 2 is used to evaluate and classify control deficiencies in manual or automated controls that are directly related to achieving relevant financial statement assertions.
- Chart 3 is used to evaluate and classify deficiencies in ITGCs that are intended to support the continued effective operation of controls related to one or more relevant financial statement assertions. If an application control deficiency is related to or caused by an ITGC deficiency, the application control deficiency is evaluated using Chart 2 and the ITGC deficiency is evaluated using Chart 3.
- Chart 4 is used to evaluate and classify control deficiencies in pervasive controls other than ITGC. Such control deficiencies generally do not directly result in a misstatement. However, they may contribute to the likelihood of a misstatement at the process level.

After evaluating and classifying individual deficiencies, consideration should be given to the aggregation of the deficiencies using the guiding principles outlined in “Consider and Evaluate Deficiencies in the Aggregate” below.

### **Evaluating Exceptions Found in the Testing of Operating Effectiveness (Chart 1)**

**General.** The testing of controls generally relates to significant processes and major classes of transactions for relevant financial statement assertions related to significant accounts and disclosures. Therefore, the underlying assumption is that all exceptions/deficiencies resulting from the testing must be evaluated because they relate to accounts and disclosures that are material to the financial statements taken as a whole.

The purpose of tests of controls is to achieve a high level of assurance that the controls are operating effectively. Therefore, the sample sizes used to test controls should provide that level of comfort. In cases in which samples are selected using a statistically based approach, sample sizes for frequently operating manual controls that result in less than a 90% level of

confidence that the upper limit deviation rate does not exceed 10% typically would not provide a high level of assurance. (Refer to the AICPA Audit and Accounting Guide, *Audit Sampling*).

The magnitude of a control deficiency (i.e., deficiency, significant deficiency, or material weakness) is evaluated based on the impact of known and/or potential misstatements on annual and interim financial statements.

While some of the concepts discussed in this paper relate to statistical sampling, the framework does not require the use of statistical sampling. A statistical sample is (1) selected on a random or other basis that is representative of the population and (2) evaluated statistically. In tests of internal controls, it may be impractical to select samples randomly, but they should be selected in an unbiased manner.

**Box 1.** All exceptions should be evaluated quantitatively and qualitatively. A thorough understanding of the cause of the exception is important in evaluating whether a test exception represents a control deficiency. This evaluation should consider the potential implications with regard to the effectiveness of other controls, e.g., the company's ITGCs and other COSO components.

In concluding whether the test objective was met, considerations include:

- The deviation rate in relation to the frequency of performance of the control (e.g., absent extending the test, there is a presumption that an exception in a control that operates less frequently than daily is a control deficiency).
- Qualitative factors, including exceptions that are determined to be systematic and recurring or that relate to the factors outlined in AS 2.133, 139, and 140.
- Whether the exception is known to have resulted in a financial statement misstatement (e.g., there is a presumption that an exception that results in a financial statement misstatement in excess of the level of precision at which the control is designed to operate, is a control deficiency).

A control objective may be achieved by a single control or a combination of controls. A test of controls may be designed to test a single control that alone achieves the control objective or a number of individual controls that together achieve the control objective.

**Box 2.** If the test objective is not met, consideration should be given to whether additional testing could support a conclusion that the deviation rate is not representative of the total population. For example, if observed exceptions result in a non-negligible deviation rate, then the test objective initially is not met. In a test designed to allow for finding one or more deviations, the

test objective is not met if the actual number of deviations found exceeds the number of deviations allowed for in the plan.

- Box 3.** If the test objective initially is not met, then there are two options:
- If the observed exceptions and resulting non-negligible deviation rate are not believed to be representative of the population (e.g., because of sampling error), the test may be extended and re-evaluated.
  - If the observed exceptions and resulting non-negligible deviation rate are believed to be representative of the population, the exceptions are considered to be a control deficiency and its significance is assessed.

### **Evaluating Process/Transaction-Level Control Deficiencies (Chart 2)**

#### ***Step 1. Determine whether a significant deficiency exists:***

**Box 1.** When evaluating deficiencies, potential magnitude (inconsequential, more than inconsequential, or material) is based on the potential effect on both annual and interim financial statements. The potential magnitude of a misstatement of annual or interim financial statements of not more than inconsequential results in the deficient control being classified as only a deficiency, absent any qualitative factors, including those in AS 2.9, 137, 139, and 140. Potential magnitude of misstatement may be based on gross exposure, adjusted exposure, or other appropriate methods that consider the likelihood of misstatement.

**Box 2&3.** If there are controls that effectively mitigate a control deficiency, it is classified as only a deficiency, absent any qualitative factors, including those in AS 2.9, 137, 139, and 140. Such controls include:

- Complementary or redundant controls that achieve the same control objective
- Compensating controls that operate at a level of precision that would result in the prevention or detection of a *more than inconsequential* misstatement of annual or interim financial statements

Boxes 1, 2, and 3 should be considered separately. Adjusted exposure should not be reduced by the quantitative impact of the compensating and complementary or redundant controls.

**Box 3.** An unmitigated deficient control that results in a control objective not being met related to a significant account or disclosure generally results in a more than remote likelihood of a *more than inconsequential* misstatement of annual or interim financial statements and, therefore, is at least a significant deficiency.

**Step 2. Determine whether a material weakness exists:**

- Box 4.** The potential magnitude of a misstatement of annual or interim financial statements that is less than material results in the deficient control being classified as only a significant deficiency, absent any qualitative factors, including those in AS 2.9, 137, 139, and 140. Potential magnitude may be based on gross exposure, adjusted exposure, or other appropriate methods that consider the likelihood of misstatement.
- Box 5.** Compensating controls that operate at a level of precision that would result in the prevention or detection of a *material* misstatement of annual or interim financial statements may support a conclusion that the deficiency is not a material weakness.
- Box 6.** In evaluating likelihood and magnitude, related factors include but are not limited to the following:
- The nature of the financial statement accounts, disclosures, and assertions involved; for example, suspense accounts and related party transactions involve greater risk.
  - The susceptibility of the related assets or liability to loss or fraud; that is, greater susceptibility increases risk.
  - The subjectivity, complexity, or extent of judgment required to determine the amount involved; that is, greater subjectivity, complexity, or judgment, like that related to an accounting estimate, increases risk.
  - The cause and frequency of known or detected exceptions in the operating effectiveness of a control; for example, a control with an observed non-negligible deviation rate is a deficiency.
  - The interaction or relationship with other controls; that is, the interdependence or redundancy of controls.
  - The possible future consequences of the deficiency.
  - An indication of increased risk evidenced by a history of misstatements, including misstatements identified in the current year (AS 2.140).
  - The adjusted exposure in relation to overall materiality.

This framework recognizes that in evaluating deficiencies, the risk of misstatement might be different for the maximum possible misstatement than for lesser possible amounts.

As a result of this additional evaluation, determine whether the likelihood of a material misstatement to both the annual and interim financial statements is remote. In extremely rare circumstances, this additional evaluation could result in a judgment that the likelihood of a more than inconsequential misstatement to both the annual and interim financial statements is remote.

**Box 7&8.** When determining the classification of a deficiency, consider AS 2.137, which states:

When evaluating the significance of a deficiency in internal control over financial reporting, the auditor also should determine the level of detail and degree of assurance that would satisfy prudent officials in the conduct of their own affairs that they have reasonable assurance that transactions are recorded as necessary to permit the preparation of financial statements in conformity with generally accepted accounting principles. If the auditor determines that the deficiency would prevent prudent officials in the conduct of their own affairs from concluding that they have reasonable assurance,\* then the auditor should deem the deficiency to be at least a significant deficiency. Having determined in this manner that a deficiency represents a significant deficiency, the auditor must further evaluate the deficiency to determine whether individually, or in combination with other deficiencies, the deficiency is a material weakness.

Note: AS 2.9 and .10 provide the definitions of significant deficiency and material weakness, respectively.

\* See SEC Staff Accounting Bulletin Topic 1M2, *Immaterial Misstatements That Are Intentional*, for further discussion about the level of detail and degree of assurance that would satisfy prudent officials in the conduct of their own affairs.

***Additional considerations related to misstatements identified:***

A greater than de minimis misstatement of annual or interim financial statements identified by management or by the auditor during a test of controls or during a substantive test is ordinarily indicative of a deficiency in the design and/or operating effectiveness of a control, which is evaluated as follows:

- The design and/or operating deficiency(ies) that did not prevent or detect the misstatement should be identified and evaluated based on Chart 2 – Evaluating Process/Transaction-Level Control Deficiencies – applying the following:
  - A known or likely (including projected) misstatement that is inconsequential to annual or interim financial statements is at least a deficiency.
  - A known or likely (including projected) misstatement that is more than inconsequential to annual or interim financial statements is a strong indicator of a significant deficiency.
  - A known or likely (including projected) misstatement that is material to annual or interim financial statements, as addressed in AS 2.140, is at least a significant deficiency and a strong indicator of a material weakness.
- The implications on the effectiveness of other controls, particularly compensating controls, also should be considered.

### Evaluating ITGC Deficiencies (Chart 3)

**General.** Deficiencies in ITGCs are evaluated in relation to their effect on application controls.

- ITGC deficiencies do not directly result in misstatements.
- Misstatements may result from ineffective application controls.

There are three situations in which an ITGC deficiency can rise to the level of a material weakness:

- An application control deficiency related to or caused by an ITGC deficiency is classified as a material weakness
- The pervasiveness and significance of an ITGC deficiency leads to a conclusion that there is a material weakness in the company's control environment
- In accordance with AS 2.140, an ITGC deficiency classified as a significant deficiency remains uncorrected after some reasonable period of time

In evaluating the effect of an ITGC deficiency on the continued effective operation of application controls, it is not necessary to contemplate the likelihood that an effective application control could in a subsequent year become ineffective because of the deficient ITGC.

**Relationship between ITGCs and application controls.** An understanding of the relationship among applications relevant to internal control over financial reporting, the related application controls, and ITGCs is necessary to appropriately evaluate ITGC deficiencies. ITGCs may affect the continued effective operation of application controls. For example, an effective security administration function supports the continued effective functioning of application controls that restrict access. As another example, effective program change controls support the continued effective operation of programmed application controls, such as a three-way match. ITGCs also may serve as controls at the application level. For example, ITGCs may directly achieve the control objective of restricting access and thereby prevent initiation of unauthorized transactions.

Similarly, ITGC deficiencies may adversely affect the continued effective functioning of application controls; in the absence of application controls, ITGC deficiencies also may represent control deficiencies for one or more relevant assertions.

**Evaluating ITGC deficiencies.** All ITGC deficiencies are evaluated using Chart 3. Additionally, if an ITGC deficiency also represents a deficiency at the application level because it directly relates to an assertion, the ITGC deficiency also is evaluated using Chart 2. In all cases, an ITGC deficiency is considered in combination with application controls to determine whether the combined effect of the ITGC deficiency and any application

control deficiencies is a deficiency, significant deficiency, or material weakness.

- Box 1.** Controls that effectively mitigate a control deficiency result in the deficiency being classified as only a deficiency, absent any qualitative factors, including those described in AS 2.9, 137, 139, and 140. Such controls include complementary or redundant controls that achieve the same control objective. An ITGC deficiency identified as a result of an application control deficiency indicates that other ITGCs could not have achieved the same control objective as the deficient ITGC.
- Box 2.** If no deficiencies are identified at the application level (as evaluated in Chart 2), the ITGC deficiency could be classified as only a deficiency. (Refer to Box 5.)
- Box 3&4.** If there is a control deficiency at the application level related to or caused by an ITGC deficiency, the ITGC deficiency is evaluated in combination with the deficiency in the underlying application control and generally is classified consistent with the application control deficiency, that is:
- A material weakness in an application control related to or caused by an ITGC deficiency indicates that the ITGC deficiency also is a material weakness.
  - A significant deficiency in an application control related to or caused by an ITGC deficiency indicates that the ITGC deficiency also is a significant deficiency.
  - An application control deficiency (that is only a deficiency) related to or caused by an ITGC deficiency generally indicates that the ITGC deficiency is only a deficiency.
- Box 5.** Notwithstanding the guiding principles relating to Boxes 1 through 4, the classification of an ITGC deficiency(ies) should consider factors including but not limited to the following:
- The nature and significance of the deficiency, e.g., does the deficiency relate to a single area in the program development process or is the entire process deficient?
  - The pervasiveness of the deficiency to applications and data, including:
    - The extent to which controls related to significant accounts and underlying business processes are affected by the ITGC deficiency
    - The number of application controls that are related to the ITGC deficiency
    - The number of control deficiencies at the application level that are related to or caused by the ITGC deficiency
  - The complexity of the company's systems environment and the likelihood that the deficiency could adversely affect application controls
  - The relative proximity of the control to applications and data

- Whether an ITGC deficiency relates to applications or data for accounts or disclosures that are susceptible to loss or fraud
- The cause and frequency of known or detected exceptions in the operating effectiveness of an ITGC; for example, (1) a control with an observed non-negligible deviation rate, (2) an observed exception that is inconsistent with the expected effective operation of the ITGC, or (3) a deliberate failure to apply a control .
- An indication of increased risk evidenced by a history of misstatements relating to applications affected by the ITGC deficiency, including misstatements in the current year

When determining the classification of a deficiency, consider AS 2.137, which states:

When evaluating the significance of a deficiency in internal control over financial reporting, the auditor also should determine the level of detail and degree of assurance that would satisfy prudent officials in the conduct of their own affairs that they have reasonable assurance that transactions are recorded as necessary to permit the preparation of financial statements in conformity with generally accepted accounting principles. If the auditor determines that the deficiency would prevent prudent officials in the conduct of their own affairs from concluding that they have reasonable assurance,\* then the auditor should deem the deficiency to be at least a significant deficiency. Having determined in this manner that a deficiency represents a significant deficiency, the auditor must further evaluate the deficiency to determine whether individually, or in combination with other deficiencies, the deficiency is a material weakness.

Note: AS 2.9 and .10 provide the definitions of significant deficiency and material weakness, respectively.

\* See SEC Staff Accounting Bulletin Topic 1M2, *Immaterial Misstatements That Are Intentional*, for further discussion about the level of detail and degree of assurance that would satisfy prudent officials in the conduct of their own affairs.

***Additional consideration:***

ITGCs support the proper and consistent operation of automated application controls. Therefore, consideration should be given to the nature, timing, and extent of the testing of related application controls affected by, or manual controls dependent on, the deficient ITGC.

## Evaluating Control Deficiencies in Pervasive Controls Other than ITGC (Chart 4)

**General.** Deficiencies in pervasive controls generally do not directly result in a misstatement. However, they may contribute to the likelihood of a misstatement at the process level. Accordingly, evaluation of a deficiency in a pervasive control other than ITGC is based on the likelihood that such deficiency would contribute to circumstances that could result in a misstatement. Quantitative methods generally are not conducive to evaluating such deficiencies.

### *Step 1. Determine whether a significant deficiency exists:*

**Box 1&2.** A deficiency of the type described in AS 2.139 ordinarily results in deficiencies being at least a significant deficiency. The circumstances in which an evaluation would lead to the deficiency not being classified as a significant deficiency are rare. The circumstances identified in AS.140 should be regarded as at least a significant deficiency and as a strong indicator of a material weakness.

**Box 3.** Certain controls could result in a judgment that the deficient control is limited to a deficiency and classified as only a deficiency, considering qualitative factors, including those in AS 2.9, 137, 139 and 140. Such controls include:

- Complementary or redundant programs or controls
- Compensating controls within the same or another component

**Box 4.** A deficiency with a more than remote likelihood that the deficiency would contribute to a more than inconsequential misstatement is a significant deficiency. Such judgment considers an evaluation of factors such as:

- The pervasiveness of the deficiency across the entity
- The relative significance of the deficient control to the component
- An indication of increased risks of error (evidenced by a history of misstatement)
- An increased susceptibility to fraud (including the risk of management override)
- The cause and frequency of known or detected exceptions for the operating effectiveness of a control
- The possible future consequences of the deficiency

### *Step 2. Determine whether a material weakness exists:*

**Box 5.** The evaluation of certain controls could result in a judgment that the deficient control is limited to a significant deficiency and classified as such, considering qualitative factors, including those in AS 2.9, 137, 139 and 140. Such controls include compensating controls within the same or another component.

- Box 6.** A deficiency with a more than remote likelihood that the deficiency would contribute to a material misstatement is a material weakness. Such judgment considers an evaluation of factors such as:
- The pervasiveness of the deficiency across the entity
  - The relative significance of the deficient control to the component
  - An indication of increased risks of error (evidenced by a history of misstatement)
  - An increased susceptibility to fraud (including the risk of management override)
  - The cause and frequency of known or detected exceptions for the operating effectiveness of a control
  - The possible future consequences of the deficiency

A deficiency of the type described in AS 2.140 is generally a material weakness; in limited circumstances, it may be appropriate to conclude the deficiency is only a significant deficiency (refer to AS.2 Appendix E99).

- Box 7&8.** When determining the classification of a deficiency, consider AS 2.137, which states:

When evaluating the significance of a deficiency in internal control over financial reporting, the auditor also should determine the level of detail and degree of assurance that would satisfy prudent officials in the conduct of their own affairs that they have reasonable assurance that transactions are recorded as necessary to permit the preparation of financial statements in conformity with generally accepted accounting principles. If the auditor determines that the deficiency would prevent prudent officials in the conduct of their own affairs from concluding that they have reasonable assurance,\* then the auditor should deem the deficiency to be at least a significant deficiency. Having determined in this manner that a deficiency represents a significant deficiency, the auditor must further evaluate the deficiency to determine whether individually, or in combination with other deficiencies, the deficiency is a material weakness.

Note: AS2.9 and .10 provide the definitions of significant deficiency and material weakness, respectively.

\* See SEC Staff Accounting Bulletin Topic 1M2, *Immaterial Misstatements That Are Intentional*, for further discussion about the level of detail and degree of assurance that would satisfy prudent officials in the conduct of their own affairs.

## **Consider and Evaluate Deficiencies in the Aggregate**

Deficiencies are considered in the aggregate by significant account balance, disclosure and COSO component to determine whether they collectively result in significant deficiencies or material weaknesses. Aggregation of control activities deficiencies by significant account balance and disclosure is necessary since the existence of multiple control deficiencies related to a specific account balance or disclosure increases the likelihood of misstatement. Aggregation by the control environment, risk assessment, information and communication, and monitoring components of COSO is more difficult and judgmental. For example, unrelated control deficiencies relating to design ineffectiveness in other COSO components could lead to the conclusion that a significant deficiency or material weakness in the risk assessment component exists. Similarly, unrelated control deficiencies in other COSO components could lead to a conclusion that a significant deficiency or material weakness in the control environment or monitoring component exists.

## Terminology

Adjusted exposure – gross exposure (see below) multiplied by the upper limit deviation rate.

Application controls – automated control procedures (e.g., calculations, posting to accounts, generation of reports, edits, control routines, etc.) or manual controls that are dependent on IT (e.g., the review by an inventory manager of an exception report when the exception report is generated by IT). When IT is used to initiate, authorize, record, process, or report transactions or other financial data for inclusion in financial statements, the systems and programs may include controls related to the corresponding assertions for significant accounts or disclosures or may be critical to the effective functioning of manual controls that depend on IT.

Compensating controls – controls that operate at a level of precision that would result in the prevention or detection of a misstatement that was more than inconsequential or material, as applicable, to annual or interim financial statements. The level of precision should be established considering the possibility of further undetected misstatements.

Complementary controls – controls that function together to achieve the same control objective.

Control deficiency – a deficiency in the design or operation of a control that does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis.

- A deficiency in *design* exists when (a) a control necessary to meet the control objective is missing or (b) an existing control is not properly designed so that, even if it operates as designed, the control objective is not always met.
- A deficiency in *operation* exists when a properly designed control does not operate as designed, or when the person performing the control does not possess the necessary authority or qualifications to perform the control effectively.

Control objective – the objective(s) related to internal control over financial reporting to achieve the assertions that underlie a company's financial statements.

Gross exposure – a worst-case estimate of the magnitude of amounts or transactions exposed to the deficiency with regard to annual or interim financial statements, without regard to the upper limit deviation rate or likelihood of misstatement, and before considering complementary, redundant, or compensating controls. Factors affecting gross exposure include:

- The annual or interim financial statement amounts or total transactions exposed to the deficiency.
- The volume of activity in the account balance or class of transactions exposed to the deficiency that has occurred in the current annual or interim period or that is expected in future periods.

### Inconsequential

- Potential misstatements equal to or greater than 20% of overall annual or interim financial statement materiality are presumed to be more than inconsequential.
- Potential misstatements less than 20% of overall annual or interim financial statement materiality may be concluded to be more than inconsequential as a result of the consideration of qualitative factors, as required by AS 2.

Information technology general controls (ITGCs) – policies and procedures that relate to many applications and support the effective functioning of application controls by helping to ensure the continued proper operation of information systems. This includes four basic IT areas that are relevant to internal control over financial reporting:

- Program development
- Program changes
- Computer operations
- Access to programs and data

Material weakness – a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected.

Pervasive controls other than ITGC – the general programs and controls within the control environment, risk assessment, monitoring, and information and communication, including portions of the financial reporting process, that have a pervasive impact on controls at the process, transaction, or application level.

Potential misstatement – an estimate of the misstatement that could result from a deficiency with a more than remote likelihood of occurrence.

Redundant controls – controls that achieve the same control objective.

Remote likelihood – the chance of the future event or events occurring is slight.

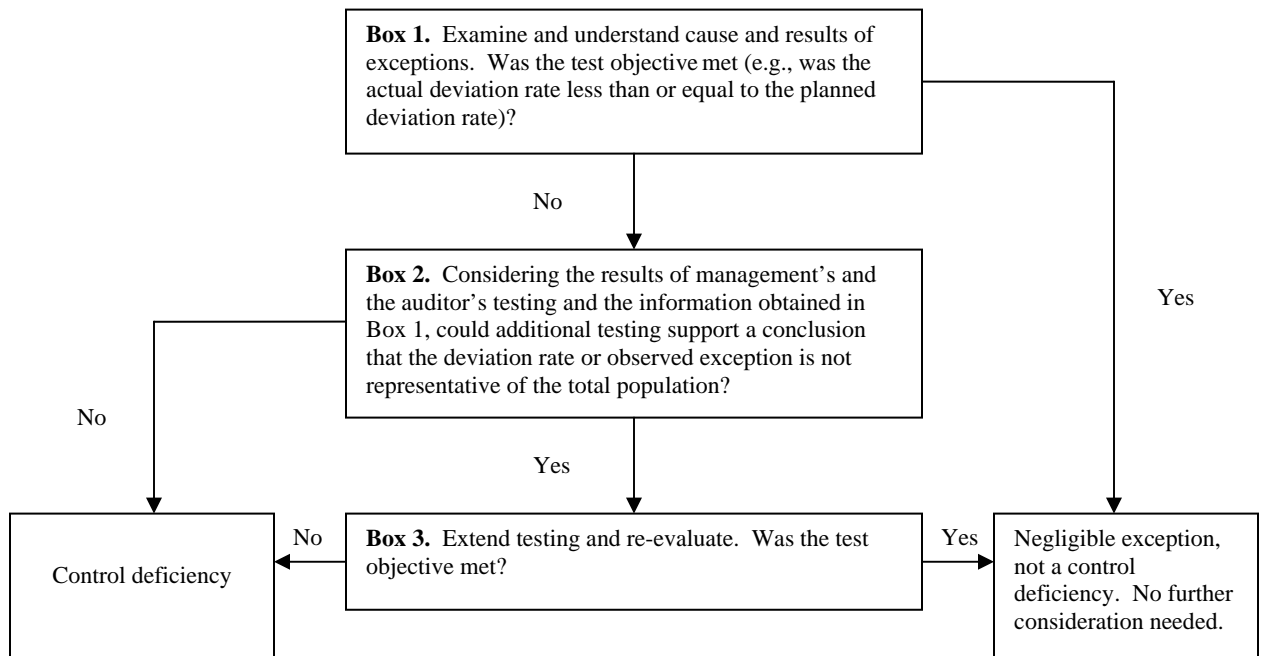
Significant deficiency – a control deficiency, or combination of control deficiencies, that adversely affects the company's ability to initiate, authorize, record, process, or report external financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the company's annual or interim financial statements that is more than inconsequential will not be prevented or detected.

Test objective – the design of the test of a control activity to determine whether the control is operating as designed, giving consideration to:

- The nature of the control and the definition of an exception
- The frequency with which the control operates
- The desired level of assurance in combination with the reliability of the control, for example, whether the control is designed to achieve the control objective alone or in combination with other controls
- The number of exceptions expected

Upper limit deviation rate – the statistically derived estimate of the deviation rate based on the sample results, for which there is a remote likelihood that the true deviation rate in the population exceeds this rate (refer to AICPA Audit and Accounting Guide, *Audit Sampling*).

# CHART 1 – Evaluating Exceptions Found in the Testing of Operating Effectiveness

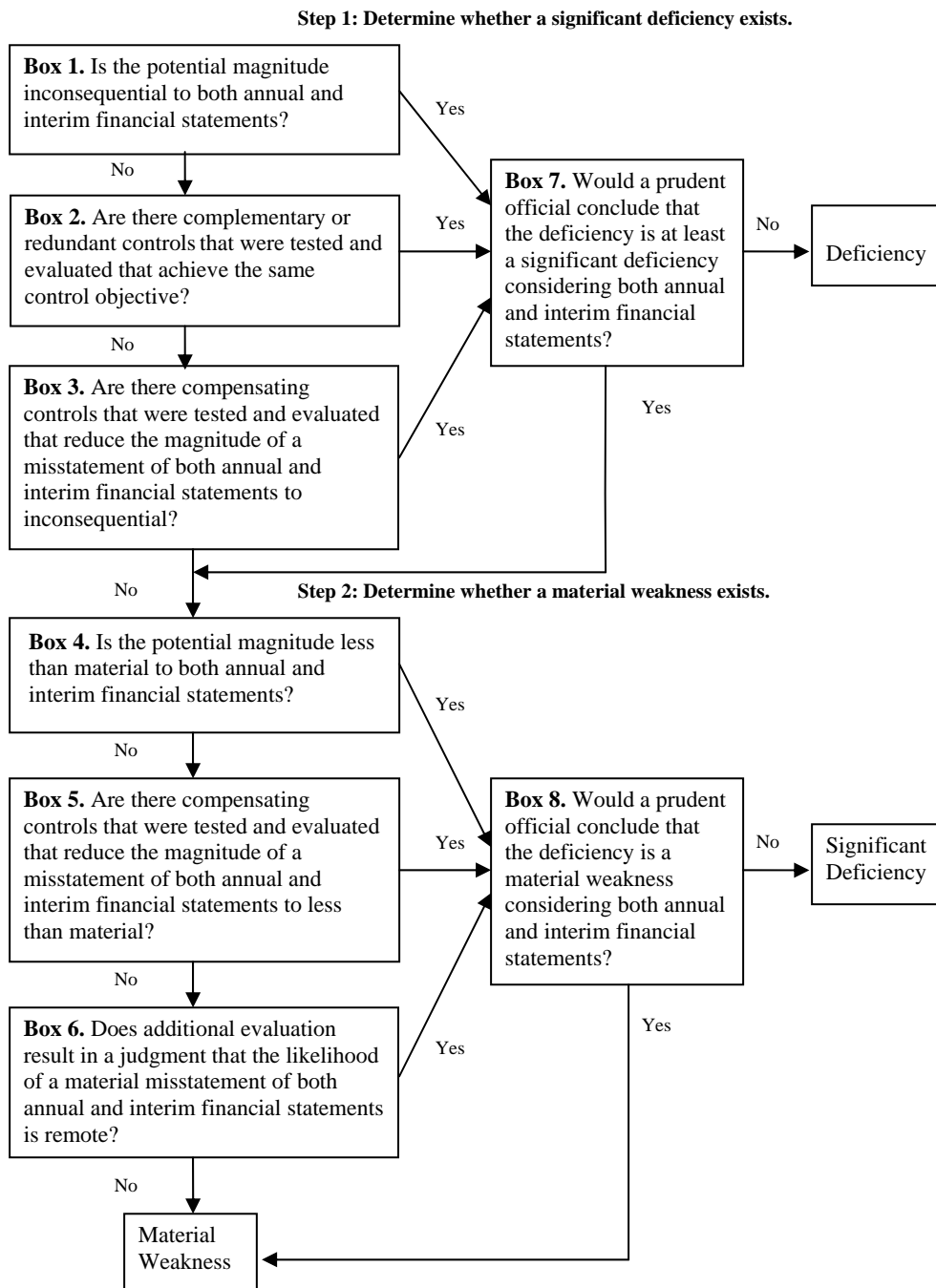


Individual boxes should be read in conjunction with the corresponding guiding principles.

## CHART 2 – Evaluating Process/Transaction-Level Control Deficiencies

This decision tree is to be used for evaluating the classification of control deficiencies from the following sources:

- Design effectiveness evaluation
- Operating effectiveness testing (from Chart 1)
- Deficiencies that resulted in a financial statement misstatement detected by management or the auditor in performing substantive test work.

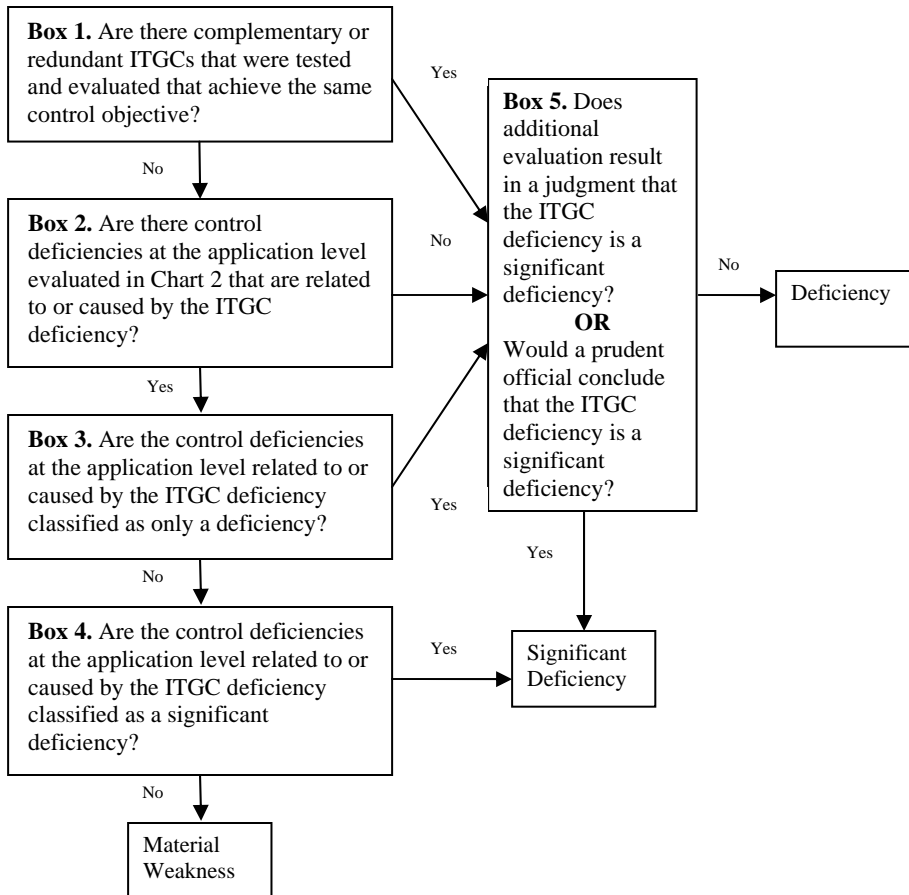


Individual boxes should be read in conjunction with the corresponding guiding principles.

## CHART 3 – Evaluating Information Technology General Control (ITGC) Deficiencies

This decision tree is to be used for evaluating the classification of information technology general control (ITGC) deficiencies from the following sources:

- ITGC design effectiveness evaluation
- ITGC operating effectiveness testing (from Chart 1)
- ITGC design or operating deficiencies identified as a result of application control testing (from Chart 2)



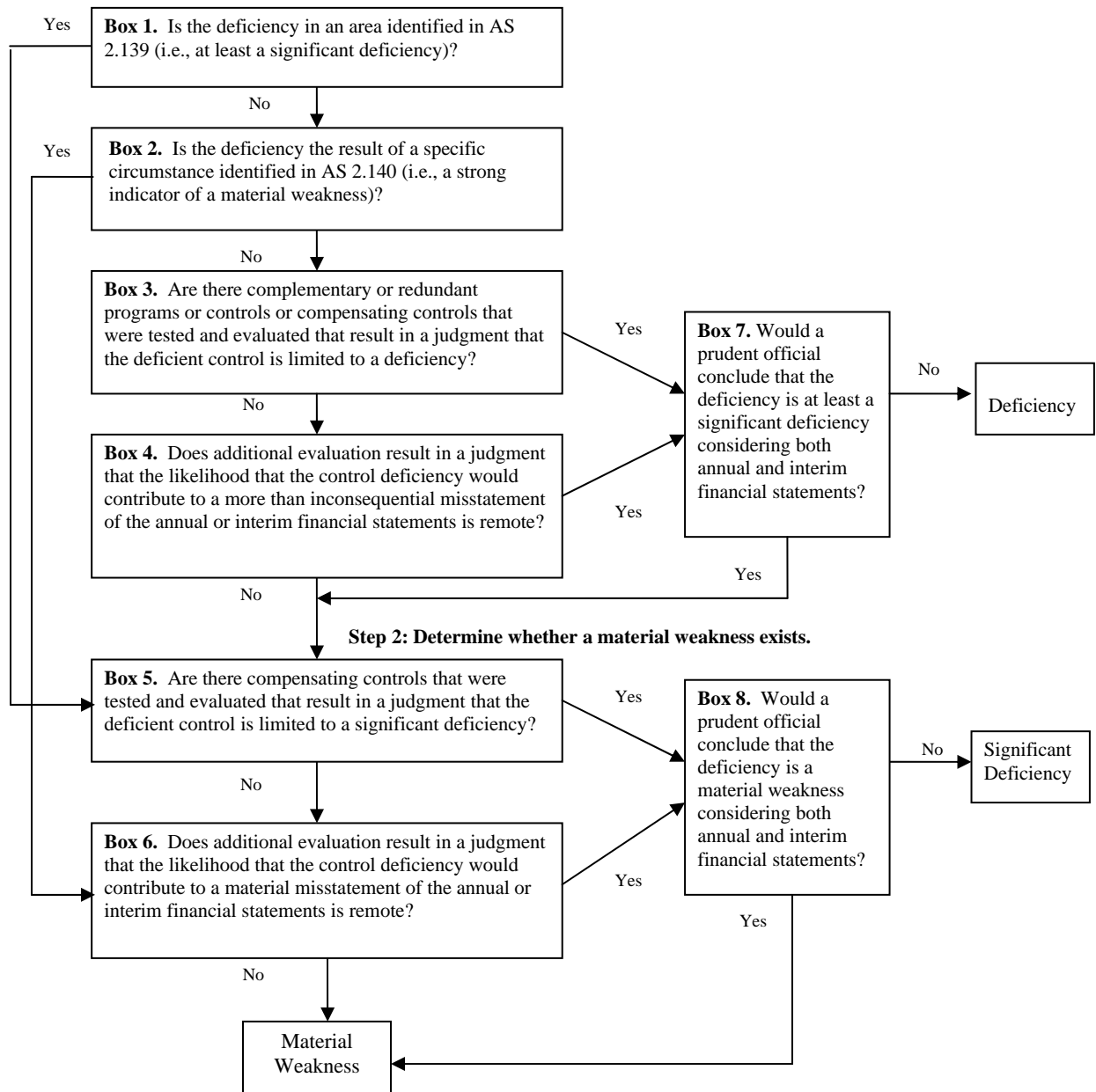
Individual boxes should be read in conjunction with the corresponding guiding principles.

# CHART 4 – Evaluating Control Deficiencies in Pervasive Controls Other than ITGC

This decision tree is to be used for evaluating the classification of control deficiencies in pervasive controls other than ITGC from the following sources:

- Design effectiveness evaluation
- Operating effectiveness testing (from Chart 1)

### Step 1: Determine whether a significant deficiency exists.



Individual boxes should be read in conjunction with the corresponding guiding principles.