

**PROPOSED INTERNATIONAL STANDARD ON AUDITING 540-545 COMBINED
(Clean)****AUDITING ACCOUNTING ESTIMATES, INCLUDING THOSE MEASURED AT FAIR
VALUE, AND RELATED DISCLOSURES****CONTENTS**

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Introduction

Scope of this ISA

1. This International Standard on Auditing (ISA) deals with the audit of accounting estimates, including those measured at fair value, and related disclosures. It expands on how the responsibilities of the auditor under ISA 315, [“Identifying and Assessing the Risks of Material Misstatement Through Understanding the Entity and Its Environment”] and ISA 330, [“The Auditor’s Responses to Assessed Risks,”] and other relevant ISAs, are to be applied in relation to accounting estimates. It also includes requirements and guidance on the auditor’s determination of misstatements relating to individual accounting estimates, and on the auditor’s consideration of indicators of possible management bias.
2. This ISA deals with all accounting estimates, including fair value measurements, and disclosures that involve estimation uncertainty. All accounting estimates involve some degree of estimation uncertainty; however, this is not the case for all fair value measurements. This ISA therefore excludes from its scope audit considerations relating to those assets, liabilities or components of equity measured at fair value where there is an active and open market that provides readily available and reliable information on the prices at which actual exchanges occur and, consequently, do not involve estimation uncertainty. (Ref: Para. A1-A11)

Effective Date

3. This ISA is effective for audits of financial statements for periods beginning on or after [date].

Objective

4. The objective of the auditor is to obtain sufficient appropriate audit evidence about whether the accounting estimates, including those measured at fair value, and related disclosures in the financial statements are reasonable.

Definitions

5. For purposes of the ISAs, the following terms have the meanings attributed below:
 - (a) “Accounting estimate” – An approximation of a monetary amount in the absence of a precise means of measurement. This term is used for an amount measured at fair value whether there is estimation uncertainty, as well as for other amounts that require estimation.
 - (b) “Auditor’s point estimate” or “auditor’s range” – The amount, or range of amounts, respectively, derived from audit evidence (whether obtained by the auditor or provided by a third-party expert engaged by the auditor) for use in evaluating management’s point estimate.
 - (c) “Estimation uncertainty” – The susceptibility of a financial statement item to an inherent lack of precision in its measurement.
 - (d) “Management bias” – A lack of neutrality by management in the preparation and presentation of information.

- (e) “Management’s point estimate” – The amount selected by management for recognition or disclosure in the financial statements as an accounting estimate.
- (f) “Significant assumption(s)” – An assumption(s) used in making an accounting estimate where a reasonable variation in the assumption(s) would materially affect the measurement of the accounting estimate.

Requirements

Risk Assessment Procedures and Related Activities

- 6. To identify the accounting estimates for which there is a risk of material misstatement, the auditor shall obtain an understanding of the following: (Ref: Para. A12)
 - (a) The requirements of the entity’s applicable financial reporting framework relevant to accounting estimates and the measurement and disclosure of financial statement items at fair value; (Ref: Para. A13-A15)
 - (b) How management identifies those transactions, events and conditions that may give rise to the need for accounting estimates in the financial statements. In obtaining this understanding, the auditor shall make inquiries of management about changes in circumstances that may give rise to new, or the need to revise existing, accounting estimates; (Ref: Para. A16-A21)
 - (c) How management makes the accounting estimates (i.e., management’s process for making the accounting estimates), and an understanding of the data on which they are based, including: (Ref: Para. A22-A23)
 - (i) Relevant internal controls; (Ref: Para. A24-A25)
 - (ii) Whether management has used an expert, from either within or outside the entity; (Ref: Para. A26-A27)
 - (iii) The assumptions underlying the accounting estimates; (Ref: Para. A28-A29)
 - (iv) Whether, and if so why, there has been a change from the prior period in the methods for making the accounting estimates; and (Ref: Para. A30)
 - (v) Whether, and if so how, management has assessed the effect of estimation uncertainty. (Ref: Para. A31)
- 7. The auditor shall review the outcome, or re-estimation, of the accounting estimates made in the prior period financial statements. (Ref: Para. A32-A36)

Assessment of the Risks of Material Misstatement

8. In assessing the risks of material misstatement, the auditor shall:
 - (a) Evaluate the degree of estimation uncertainty associated with an accounting estimate, and the susceptibility of the accounting estimate to bias; and (Ref: Para. A37-A38)
 - (b) Determine which accounting estimates, whether recognized or disclosed in the financial statements, have high estimation uncertainty and may, therefore, give rise to significant risks. (Ref: Para. A39-A43)

Responses to the Assessed Risks of Material Misstatement

9. Based on the assessed risks of material misstatement, the auditor shall determine, to the extent not already done: (Ref: Para. A44)
 - (a) Whether management has appropriately applied the requirements of the applicable financial reporting framework relevant to the accounting estimate; and (Ref: Para. A45-A47)
 - (b) Whether the methods for making the accounting estimates have been applied consistently, and the basis for changes, if any, in accounting estimates from the prior period. (Ref: Para. A48-A50)
10. In response to the assessed risks of material misstatement of an accounting estimate, the auditor shall undertake one or more of the following: (Ref: Para. A51-A52)
 - (a) Determine whether events occurring up to the date of the auditor's report confirm or contradict the accounting estimate. (Ref: Para. A53-A59)
 - (b) Test how management made the accounting estimate and the data on which it is based, and evaluate whether the assumptions used by management, individually and collectively, are reasonable. (Ref: Para. A60-A73)
 - (c) Test the operating effectiveness of the controls over how management made the accounting estimate, together with appropriate substantive procedures. (Ref: Para. A74-A76)
 - (d) Develop, or use an expert to develop, a point estimate or a range to evaluate management's point estimate. When developing a range, the auditor shall narrow the range, based on audit evidence available, until all outcomes within the range are considered reasonable. (Ref: Para. A77-A88)

The auditor's decision as to which of the above to undertake, individually or in combination, is a matter of judgment, taking account of the circumstances of the engagement.

Further Substantive Procedures to Respond to Significant Risks

Estimation Uncertainty

11. For accounting estimates that give rise to significant risks, in addition to other substantive procedures performed to meet the requirements of ISA 330, the auditor shall evaluate: (Ref: Para. A89)
 - (a) How management has considered alternative assumptions or outcomes, and why they have rejected them, or otherwise has addressed the effects of estimation uncertainty on the accounting estimates; and (Ref: Para. A90-A93)
 - (b) To the extent not already done, whether the significant assumptions used by management are reasonable, including, where relevant, management's intent to carry out specific courses of action and its ability to do so. (Ref: Para. A94-A95)
12. Where, in the auditor's judgment, management has not adequately addressed the effects of estimation uncertainty on the accounting estimates that give rise to significant risks, the auditor shall consider whether it is necessary to develop a range with which to evaluate the reasonableness of the accounting estimate, to the extent not already done. (Ref: Para. A96)

Recognition of the Accounting Estimates in the Financial Statements

13. For accounting estimates that give rise to significant risks, the auditor shall obtain sufficient appropriate audit evidence about whether management's decision to:
 - (a) recognize, or to not recognize, the accounting estimate in the financial statements; or (Ref: Para. A97-A98)
 - (b) measure, or to not measure, the accounting estimate at fair value, (Ref: Para. A99)is in accordance with the applicable financial reporting framework.

Disclosures of Estimation Uncertainty

14. For accounting estimates that give rise to significant risks, the auditor shall determine whether the applicable financial reporting framework requires disclosure of estimation uncertainty and, if so, the auditor shall evaluate the adequacy of such disclosure. (Ref: Para. A100-A102)

Evaluating the Reasonableness of the Accounting Estimates and Related Disclosures, and Determining Misstatements

15. The auditor shall evaluate, based on the audit evidence, whether the accounting estimates and related disclosures in the financial statements are either reasonable in the context of the entity's applicable financial reporting framework, or are misstated. (Ref: Para. A103-A107)

Indicators of Possible Management Bias

16. The auditor shall determine whether there are indicators of possible management bias in the making of accounting estimates for the purposes of the auditor's consideration of whether the auditor's risk assessment and related responses remain appropriate, and the auditor's

evaluation of whether the financial statements as a whole are free from material misstatement. (Ref: Para. A108-A109)

Management Representations

17. The auditor shall obtain written representations from management regarding the reasonableness of significant assumptions used by it in making accounting estimates. (Ref: Para. A110-A111)

Documentation

18. The auditor shall document:
- (a) The basis for the auditor's conclusions about the reasonableness of accounting estimates that give rise to significant risks; and (Ref: Para. A112)
 - (b) Indicators of possible management bias. (Ref: Para. A113)

Application and Other Explanatory Material

Nature of Accounting Estimates, Including Those Measured or Disclosed at Fair Value

(Ref: Para. 2)

- A1. Because of the uncertainties inherent in business activities, some financial statement items cannot be measured precisely, but can only be estimated. Further, the specific characteristics of an asset, liability or component of equity, or the method of measurement prescribed by the financial reporting framework for measurement may give rise to the need to estimate a financial statement item. Estimation involves judgments based on information available at the time of preparation of the financial statements. For purposes of this ISA, all financial statement items that require estimation, and therefore involve estimation uncertainty, are considered to be accounting estimates, irrespective of the basis of measurement.
- A2. For many accounting estimates, management is required to develop assumptions about the outcome of future conditions, transactions or events that are uncertain at the time of estimation. However, although this is also true for some estimates measured or disclosed at fair value, estimation of fair value is different in that the concept of fair value ordinarily assumes a hypothetical current transaction, rather than settlement at some past or future date, between knowledgeable, willing parties in an arm's length transaction.¹ Accordingly, the process of measuring fair value is the search for the estimated price at which that transaction would occur. Although this may affect the method in which management makes the accounting estimate and the nature of the assumptions to be used, and the auditor's considerations thereof, it does not change the objective of the auditor when auditing such estimates.

¹ Different definitions of fair value may exist among financial reporting frameworks. The Appendix to this ISA discusses fair value measurements and disclosures under different financial reporting frameworks.

- A3. Not all financial statement items requiring measurement at fair value, however, involve estimation uncertainty. For example, for some financial statement items there is an active and open market that provides readily available and reliable information on the prices at which actual exchanges occur (in which case the existence of published price quotations ordinarily provides sufficient appropriate audit evidence). The measurement of such items does not involve the making of an accounting estimate and is therefore outside the scope of this ISA.
- A4. Examples of situations where accounting estimates may be required, and that do not ordinarily require measurement at fair value, include:
- Allowance for doubtful accounts
 - Inventory obsolescence
 - Warranty obligations
 - Depreciation method or asset useful life
 - Outcome of long term contracts
 - Costs arising from litigation settlements and judgments
- A5. Examples of situations where accounting estimates may be required that may involve measurement at fair value include:
- Complex financial instruments which are not traded in an active and open market.
 - Property or equipment held for disposal.
 - Certain assets or liabilities acquired in a business combination.
 - Transactions involving the exchange of assets or liabilities between independent parties without monetary consideration, for example, a non-monetary exchange of plant facilities in different lines of business.
- A6. Some accounting estimates, irrespective of whether they require measurement at fair value, involve relatively low estimation uncertainty and may give rise to lower risks of material misstatements, for example: accounting estimates that relate to routine transactions; or accounting estimates measured at fair value that involve discounting of contractual cash flows. This may be the case for accounting estimates arising in smaller entities that engage in business activities that are not complex.
- A7. For some accounting estimates, however, there may be relatively high estimation uncertainty, particularly where they are based on significant assumptions, for example: accounting estimates relating to the outcome of litigation; or derivative financial instruments not publicly traded or exchanged. In some cases, the sensitivity of an accounting estimate to changes in assumptions may be so great that a reliable estimate cannot be made.
- A8. Some financial reporting frameworks prescribe specific methods of measurement and the disclosures that are required to be made in the financial statements, while other financial reporting frameworks are less specific.
- A9. In addition, financial reporting frameworks often call for neutrality, that is, freedom from bias. Accounting estimates are imprecise, however, and are influenced by management

judgment. Such judgment may involve unintentional or intentional management bias as a result of motivation to achieve a desired result. The susceptibility of an accounting estimate to management bias increases with the degree of subjectivity of the decisions involved in making the accounting estimate. Unintentional management bias and the potential for intentional management bias are inherent in subjective decisions that are often required in making an accounting estimate. For continuing audits, indicators of possible management bias identified during the audit of the preceding periods influence the planning and risk identification and assessment activities of the auditor in the current period.

- A10. Management bias can be difficult to detect at an account level. It may only be identified when considered in the aggregate of groups of estimates or all estimates, or when observed over a number of accounting periods. Although some form of management bias is inherent in subjective decisions, in making such judgments there may be no intention by management to mislead the users of financial statements. Where, however, there is intention to mislead, management bias is fraudulent in nature. ISA 240, [“The Auditor’s Responsibilities Relating to Fraud in an Audit of Financial Statements”] establishes requirements and provides guidance on the auditor’s [responsibilities relating] to fraud in an audit of financial statements.

Considerations Specific to Public Sector Entities

- A11. Public sector entities may have significant holdings of specialized assets for which there is no active or open market that can provide readily available and reliable information for purposes of measurement at fair value. Further, many assets held by public sector entities do not generate cash flows. For these reasons, measurement at fair value ordinarily requires estimation and is complex.

Risk Assessment Procedures and Related Activities (Ref: Para. 6)

- A12. The risk assessment procedures and related activities required by this ISA assist the auditor in developing an expectation of the nature and type of accounting estimates that an entity may have. The expectation is used for purposes of identifying and assessing risks, and planning the nature, timing and extent of further audit procedures.

Obtaining an Understanding of the Requirements of the Financial Reporting Framework (Ref: Para. 6(a))

- A13. Obtaining an understanding of the requirements of the entity’s applicable financial reporting framework assists the auditor in determining whether it, for example:
- Prescribes certain conditions for the recognition², or methods for the measurement, of accounting estimates.
 - Specifies certain conditions that permit or require measurement at a fair value, for example, by referring to management’s intentions to carry out certain courses of action

² Most financial reporting frameworks require incorporation in the balance sheet or income statement of items that satisfy their criteria for recognition. Disclosure of accounting policies or adding notes to the financial statements does not rectify a failure to recognize such items, including accounting estimates.

with respect to an asset or liability as criteria for determining whether to use fair value accounting or how it is applied.

- Specifies required or permitted disclosures.

It also provides the auditor with a basis for discussion with management about how it has applied those requirements relevant to the accounting estimate.

A14. In some cases, management may be able to make a point estimate directly. In other cases, management may be able to make a reliable point estimate only after considering alternative assumptions or outcomes from which it is able to determine a point estimate. Financial reporting frameworks may, or may not, provide guidance for management on determining point estimates where alternatives exist. Some financial reporting frameworks, for example, require that the point estimate be selected from the alternative that reflects management's judgment of the most likely outcome.³

A15. Financial reporting frameworks may require the disclosure of information concerning the significant assumptions to which the estimate is particularly sensitive. Furthermore, where there is a high degree of estimation uncertainty, some financial reporting frameworks do not permit an accounting estimate to be recognized in the financial statements, but certain disclosures may be required in the notes to the financial statements.

Obtaining an Understanding of How Management Identifies the Need for Accounting Estimates
(Ref: Para. 6(b))

A16. In preparing the financial statements, management has the responsibility to determine whether a transaction, event or condition gives rise to the need to make an accounting estimate, and that all necessary accounting estimates have been recognized, measured and disclosed in the financial statements in accordance with the applicable financial reporting framework.

A17. Management's identification of transactions, events and conditions that give rise to the need for accounting estimates is likely to be based on:

- Its knowledge of the entity's business and the industry in which it operates.
- Its knowledge of the implementation of strategies in the current period.
- Where applicable, its cumulative experience of preparing the entity's financial statements in prior periods.

In such cases, the auditor may obtain an understanding of how management identifies the need for accounting estimates solely through inquiry of management. In other cases, where management's process may be more structured, the auditor may perform risk assessment procedures directed at the methods and practices followed by management for periodically reviewing the circumstances that give rise to the accounting estimates and re-estimating the accounting estimates as necessary.

³ Different financial reporting frameworks may use different terminology to describe point estimates determined in this way.

- A18. The completeness of accounting estimates is often a primary consideration of the auditor, particularly estimates relating to liabilities. The auditor's understanding of the entity and its environment obtained during the performance of risk assessment procedures, together with other audit evidence obtained during the course of the audit, assist the auditor in identifying circumstances, or changes in circumstances, that may give rise to the need for an accounting estimate.
- A19. Inquiries of management about changes in circumstances may include, for example, inquiries about whether:
- The entity has engaged in new types of transactions that may give rise to accounting estimates.
 - Terms of transactions that gave rise to accounting estimates have changed.
 - The requirements of the applicable financial reporting framework have changed.
 - Regulatory or other changes outside the control of management have occurred that may require management to revise, or make new, accounting estimates.
 - New conditions or events have occurred that may give rise to the need for new or revised accounting estimates.
- A20. During the audit, the auditor may identify transactions, events and conditions that give rise to the need for accounting estimates that management failed to identify. ISA 315 provides guidance when the auditor identifies a material weakness in the entity's risk assessment processes.

Considerations Specific to Smaller Entities

- A21. For smaller entities, obtaining this understanding is often straightforward because the range of business activities of those entities is often more limited than that of a larger entity and the transactions are often less complex. Further, often a single person, for example the owner-manager, determines the need to make an accounting estimate and the auditor may focus inquiries accordingly.

Obtaining an Understanding of How Management Makes the Accounting Estimates (Ref: Para. 6(c))

- A22. Management is responsible for making accounting estimates and establishing financial reporting processes for measuring them, including adequate internal controls. Such processes include the following:
- Selecting appropriate accounting policies and prescribing estimation processes, including appropriate estimation or valuation methods.
 - Developing or identifying relevant assumptions that affect accounting estimates.
 - Periodically reviewing the circumstances that give rise to the accounting estimates and re-estimating the accounting estimates as necessary.

A23. Matters that the auditor may consider in obtaining an understanding of how management makes the accounting estimates include, for example:

- The types of accounts or transactions to which the accounting estimates relate (for example, whether the estimates arise from the recording of routine and recurring transactions or whether they arise from non-recurring or unusual transactions).
- Whether, and if so how, management has used recognized measurement techniques for making particular accounting estimates.
- Whether the accounting estimates were made based on data available at an interim date and if so, how management has taken into account the effect of events, transactions and changes in circumstances occurring between that date and the period end.

Relevant Internal Controls (Ref: Para. 6(c)(i))

A24. Matters that the auditor may consider in obtaining an understanding of relevant internal controls include, for example:

- The experience and competence of those who make the accounting estimates.
- How management determines the completeness, relevance and accuracy of the data used to develop accounting estimates.
- The controls over the review and approval of accounting estimates by appropriate levels of management and, where appropriate, those charged with governance.
- The controls over data and the segregation of duties between those committing the entity to the underlying transactions and those responsible for making the accounting estimates.

A25. Other controls may be relevant to making the accounting estimates. For example, in some cases the entity may use a specific model for making an accounting estimate and put into place specific processes around use of that model, thereby making certain control activities over that process particularly relevant.

Use of Experts (Ref: Para. 6(c)(ii))

A26. Management may have, or the entity may employ individuals with, the experience and competence necessary to make the required point estimates. In some cases, however, management may need to engage an expert to make, or assist in making, them. This need may arise because of, for example:

- The complexity of matter requiring estimation, for example the measurement of mineral or hydrocarbon reserves in extractive industries.
- The complexity of the relevant requirements of the applicable financial reporting framework, as may be the case in certain measurements at fair value.
- The unusual or infrequent nature of the condition, transaction or event requiring an accounting estimate.

Considerations specific to smaller entities

A27. In smaller entities, the circumstances that give rise to the need for an accounting estimate often are such that the owner-manager is capable of making the required point estimate. In some cases, however, an expert is needed to make, or assist in making, it, and the owner-manager may not have the experience or competence necessary to identify this need. Discussion with the owner-manager early in the audit process about the nature of the accounting estimates and the adequacy of the process to make them may assist the owner-manager in determining the need to use an expert.

Assumptions (Ref: Para. 6(c)(iii))

A28. Assumptions are integral components of accounting estimates. Matters that the auditor may consider in obtaining an understanding of the assumptions underlying the accounting estimates include, for example:

- The nature of the assumptions, including which of the assumptions are likely to be significant assumptions, and how management assesses whether the assumptions are complete (i.e., that relevant variables have been taken into account).
- How management determines that the assumptions used are relevant, reliable, neutral, understandable and complete, and where applicable, internally consistent.
- Whether the assumptions relate to matters within the control of management (for example, assumptions about the maintenance programs that may affect the estimation of an asset's useful life), and how they conform to the entity's business plans and the external environment, or to matters that are outside its control (for example, assumptions about interest rates, mortality rates, potential judicial or regulatory actions, or the variability and the timing of future cash flows).
- The nature and extent of documentation, if any, supporting the assumptions.

A29. With respect to accounting estimates involving fair value measurement, the nature of the assumptions used by management may differ from those used in other accounting estimates. The difference relates to the need for management to use assumptions that reflect, or are consistent with, those assumptions which knowledgeable, willing arm's length parties (sometimes referred to as "market participants") would use in determining the fair value when exchanging an asset or settling a liability. Specific assumptions will also vary with the characteristics of the asset or liability being valued and the valuation method used (for example, replacement cost, market or an income-based approach).

Changes in Methods for Making Accounting Estimates (Ref: Para. 6(c)(iv))

A30. Once management has selected a specific estimation method, it is important that management consider changes in the environment or circumstances affecting the entity or changes in the entity's applicable financial reporting framework. If management has changed the method for making an accounting estimate, it is important that management can demonstrate that the new method provides a more appropriate basis of measurement, or that

the change is supported by a change in the applicable financial reporting framework, or a change in circumstances.

Estimation Uncertainty (Ref: Para. 6(c)(v))

A31. Matters that the auditor may consider in obtaining an understanding of whether, and if so how, management has assessed the effect of estimation uncertainty include, for example:

- Whether, and if so how, management has considered alternative assumptions or outcomes by, for example, performing a sensitivity analysis to determine the effect of changes in the assumptions on an accounting estimate.
- How management determines the accounting estimate when analysis indicates a number of outcome scenarios.
- Whether management monitors the outcome of accounting estimates made in the prior period, and whether management has appropriately responded to the outcome of that monitoring procedure.

Reviewing the Outcome or Re-Estimation of Prior Period Accounting Estimates (Ref: Para. 7)

A32. The outcome of an accounting estimate will often differ from the accounting estimate recognized in the prior period financial statements. By performing risk assessment procedures to identify and understand the reasons for such differences, the auditor may obtain:

- Information regarding the effectiveness of management's prior period estimation process, from which the auditor can judge the likely effectiveness of management's current process.
- Audit evidence that is pertinent to the re-estimation, in the current period, of prior period accounting estimates.
- Audit evidence of matters, such as estimation uncertainty, that may be required to be disclosed in the financial statements.

A33. The review of the outcome or re-estimation of prior period accounting estimates may assist the auditor in identifying circumstances or conditions that increase the susceptibility of an accounting estimate to, or indicate the presence of, possible management bias. The auditor's attitude of professional skepticism assists in identifying such circumstances or conditions and in determining the nature, timing and extent of further audit procedures. This review also assists the auditor in understanding whether there has been a change in, or re-estimation of, an accounting estimate from the prior period, and management's basis thereof. However, the review is not intended to call into question the judgments made in the prior year that were based on information available at the time.

A34. For accounting estimates involving measurement at fair value, more variation is likely to exist between the fair value amount recognized in the prior period financial statements and the actual outcome or the re-estimated amount in the current period financial statements. This is because the estimation of fair value assumes perceptions by market participants about

value at a point in time, which may change significantly and rapidly as the environment in which the entity operates changes.

- A35. A retrospective review is also required by ISA 240. That review is conducted as part of the requirement for the auditor to design and perform procedures to review accounting estimates for bias that could result in material misstatements due to fraud, in response to the risks of management override of controls. However, as a practical matter, the auditor's review of the outcome, or re-estimation, of accounting estimates made in the prior period financial statements as a risk assessment procedure in accordance with this ISA may be carried out in conjunction with the review required by ISA 240.
- A36. A difference between the outcome of an accounting estimate and the amount recognized in the prior period financial statements does not necessarily represent a misstatement of the prior period financial statements. However, it may do so if, for example, the difference arises from information that was available to management when the prior period's financial statements were finalized, or that could reasonably be expected to have been obtained and taken into account in preparing and presenting those financial statements. Many financial reporting frameworks contain guidance on distinguishing between changes in accounting estimates that constitute misstatements and changes that do not, and the accounting treatment required to be followed.

Assessment of the Risks of Material Misstatement

Estimation Uncertainty (Ref: Para. 8(a))

- A37. The degree of estimation uncertainty associated with an accounting estimate, and its susceptibility to bias, may be influenced by factors such as:
- The extent to which the accuracy of an accounting estimate depends on judgment.
 - The degree of sensitivity of the accounting estimate to changes in assumptions.
 - The existence of recognized measurement techniques that may mitigate the estimation uncertainty.
 - The length of the forecast period, and the relevance of data drawn from past events to predict future events.
 - The existence of objective data.
- A38. Matters that the auditor considers in assessing the risks of material misstatement may also include:
- The actual or expected magnitude of an estimate.
 - The recorded amount of the estimate in relation to the amount expected by the auditor to be recorded.
 - The outcome of the review of prior period estimates.

High Estimation Uncertainty and Significant Risks (Ref: Para. 8(b))

A39. Examples of estimates that may have high estimation uncertainty include the following:

- Accounting estimates that are highly dependent upon management's judgment of the outcome of uncertain future conditions, transactions or events, for example, judgments about the outcome of pending litigation or the amount and timing of future cash flows.
- Accounting estimates that are not calculated using recognized measurement techniques.
- Accounting estimates where the results of the auditor's review of the outcome, or re-estimation, of accounting estimates made in the prior period financial statements indicate a substantial difference between the original estimate and the outcome.

A40. In determining which accounting estimates have high estimation uncertainty, the materiality of the amount currently recognized or disclosed in the financial statements is disregarded because even a seemingly immaterial estimate may have the potential to result in a material misstatement due to the estimation uncertainty associated with the estimation; that is, the materiality of the amount recognized or disclosed in the financial statements for an accounting estimate may not be an indicator of its estimation uncertainty.

A41. In some circumstances, the estimation uncertainty is so high that a reasonable estimate cannot be made. The applicable financial reporting framework may, therefore, preclude recognition of the item in the financial statements, or its measurement at fair value. In such cases, the significant risks relate not only to whether an accounting estimate should be recognized, or whether it should be measured at fair value, but also to the adequacy of the disclosures. With respect to such accounting estimates, the financial reporting framework may require disclosure of the accounting estimates and the high estimation uncertainty associated with them (see paragraphs A100-A102).

A42. Where the auditor determines that an accounting estimate gives rise to a significant risk, ISA 315 requires, to the extent not already done, the auditor to evaluate the design of the entity's related controls, including relevant control activities, and to determine whether they have been implemented.

A43. In some cases, the estimation uncertainty of an accounting estimate may cast significant doubt about the entity's ability to continue as a going concern. ISA 570, "Going Concern" establishes requirements and provides guidance in such circumstances.

Responses to the Assessed Risks of Material Misstatement (Ref: Para. 9)

A44. ISA 330 requires the auditor to design and perform audit procedures whose nature, timing, and extent are responsive to the assessed risks of material misstatement in relation to accounting estimates at both the financial statement and assertion levels. The following focuses on specific responses at the assertion level only.

Application of the Requirements of the Applicable Financial Reporting Framework (Ref: Para. 9(a))

A45. Many financial reporting frameworks prescribe certain conditions for the recognition of accounting estimates and specify the methods for their measurement and required

disclosures. Such requirements may be complex and require the application of judgment. Based on the understanding obtained in performing risk assessment procedures, the requirements of the applicable financial reporting framework that may be susceptible to misapplication or differing interpretations become the focus of the auditor's attention.

- A46. Determining whether management has appropriately applied the requirements of the applicable financial reporting framework may depend, in part, on the auditor's understanding of the entity and its environment. For example, the measurement of the fair value of some items, such as intangible assets acquired in a business combination, may involve special considerations that are affected by the nature of the entity and its operations.
- A47. In some situations, additional audit procedures, such as the inspection by the auditor of the current physical condition of an asset, may be necessary to determine whether management has properly applied the requirements of the applicable financial reporting framework.
- A48. The application of the requirements of the applicable financial reporting framework requires management to consider changes in the environment or circumstances that affect the entity. For example, the introduction of an active market for a particular class of asset or liability may indicate that the use of discounted cash flows to estimate the fair value of such asset or liability is no longer appropriate.

Consistency in Methods and Basis for Changes (Ref: Para. 9(b))

- A49. The auditor consideration of whether and why management has changed an accounting estimate or the method for making the accounting estimate from the prior period is important because a change that is not based on a change in circumstances or new information is considered arbitrary. Arbitrary changes in an accounting estimate result in inconsistent financial statements over time.
- A50. Management often is able to demonstrate good reason for a change in an accounting estimate or the method for making an accounting estimate from one period to another based on a change in circumstances. What constitutes a good reason, and the adequacy of support for management's contention that there has been a change in circumstances that warrants a change in an accounting estimate or the method for making an accounting estimate, is a matter of judgment.

Responses to the Assessed Risks of Material Misstatements (Ref: Para. 10)

- A51. The auditor's decision as to which response identified in paragraph 10 to undertake, individually or in combination, to respond to the risks of material misstatement is influenced by such matters as:
- The nature of the estimate including whether it arises from routine or non routine transactions.
 - Whether the procedure(s) is expected to effectively provide the auditor with sufficient appropriate audit evidence.
 - The assessed risk of material misstatement, including whether the assessed risk is a significant risk.

A52. Additional guidance explaining the circumstances in which each of the responses may be appropriate is provided below.

Events Occurring Up to the Date of the Auditor's Report (Ref: Para. 10(a))

A53. Determining whether events occurring up to the date of the auditor's report confirm or contradict the accounting estimate may be an appropriate response when such events are expected to:

- occur; and
- provide audit evidence regarding the accounting estimate such as to remove the need to perform additional procedures on the estimate.

A54. For example, sale of inventory of a superseded product shortly after the period end may provide audit evidence relating to the estimate of the net realizable value of that inventory. There may be no need to perform additional audit procedures on the estimate, provided that sufficient appropriate evidence about the events is obtained.

A55. Similarly, a sale of investment property after the period end may provide evidence relating to its fair value measurement. However, fair value information after the period-end may reflect events occurring after the period-end and not the circumstances existing at the balance sheet date.

A56. Events that contradict the accounting estimate, however, may be indicative of management having ineffective processes for making accounting estimates.

A57. For some accounting estimates, it may be unlikely that events occurring up to the date of the auditor's report will confirm, or contradict, the accounting estimate, as conditions or events relating to some accounting estimates often develop only over an extended period. In such cases, the auditor may need, instead, to perform one or more of the other procedures identified in paragraph 10.

A58. A decision by the auditor not to determine whether events occurring up to the date of the auditor's report confirm or contradict the accounting estimate does not relieve the auditor from complying with ISA 560, "Subsequent Events." ISA 560 requires the auditor to design procedures to obtain audit evidence that all events up to the date of the auditor's report that may require adjustment of, or disclosure in, the financial statements have been identified. Because the measurement of accounting estimates usually depends on the outcome of future conditions, transactions or events, the auditor's work under ISA 560 is particularly relevant.

Considerations specific to smaller entities

A59. In the case of some smaller entities, this procedure may be particularly effective where there is a long period after the balance sheet date available for review of such events by the auditor.

Testing How Management Made the Accounting Estimate (Ref: Para. 10(b))

A60. Testing how management made the accounting estimate may be an appropriate response when, for example:

- The accounting estimate is derived from the routine processing of data by the entity's accounting system.
- The auditor's review of the outcome, or re-estimation, of accounting estimates of a similar nature made in the prior period financial statements, suggests that management's current period process is likely to be effective.
- The accounting estimate is based on a large population of items of a similar nature that individually are not significant.

A61. Testing how management made the accounting estimate may involve, for example, the following:

- Testing the extent to which data on which the accounting estimate is based is accurate, complete and relevant, and whether the estimate has been properly determined using such data and management assumptions.
- Considering the source, relevance and reliability of external data.
- Recalculating the accounting estimate, and reviewing information about an accounting estimate for internal consistency.
- Considering management's review and approval processes.
- Considering whether there are any indicators of possible management bias in the making of the accounting estimate (see paragraphs A108-A109).

A62. In many cases, particularly in relation to measurement at fair value, the entity's applicable financial reporting framework may not prescribe the method of measurement, or may specify alternative methods for measurement. In such cases, determining whether the method of measurement used is appropriate in the circumstances under the entity's applicable financial reporting framework is a matter of professional judgment. For this purpose, matters that the auditor may consider include, for example:

- Management's rationale for the method selected.
- Whether management has sufficiently evaluated and appropriately applied the criteria, if any, provided in the applicable financial reporting framework to support the selected method.
- Whether the method is appropriate in the circumstances given the nature of the asset or liability being estimated.
- Whether the method is appropriate in relation to the business, industry and environment in which the entity operates.

A63. In some cases, management may have determined that different methods result in a range of significantly different estimates. In such cases, obtaining an understanding of how the entity has investigated the reasons for these differences may assist the auditor in evaluating the appropriateness of the method selected.

A64. In some cases, particularly when determining fair value, management may make the estimate by using a model. Matters that the auditor may consider in such circumstances include, for example, whether:

- The model is appropriate in the circumstances. For example, it may be inappropriate to use a discounted cash flow model in valuing an equity investment in a start-up enterprise if there are no current revenues on which to base the forecast of future earnings or cash flows.
- The model incorporates variables, where relevant, that are appropriately supported.
- Management periodically calibrates the valuation model and tests it for validity based on observable market data.

Assumptions

A65. In testing how management has made an accounting estimate, paragraph 10(b) requires the auditor to evaluate whether the assumptions, individually and collectively, are reasonable for the purpose of making the accounting estimate. The auditor's consideration of the assumptions used by management's is based only on information available to the auditor at the time of the audit. The auditor is not responsible for predicting future conditions, transactions or events that, if known at the time of the audit, might have significantly affected management's actions or the assumptions used by management.

A66. Assumptions may be supported by differing types of evidence from internal and external sources. Further, for accounting estimate measured at fair value, management is generally faced with a range of different assumptions used in the market place by different market participants. In some cases, assumptions may be made or identified by an expert to assist management in making the accounting estimates. Such assumptions, when used by management, become management's assumptions.

A67. Assumptions used by management are considered both individually and collectively because they are frequently interdependent, and therefore need to be internally consistent. An assumption that appears reasonable when taken in isolation may not be reasonable when used in conjunction with other assumptions, either for that estimate or for other estimates.

A68. The assumptions on which accounting estimates are based ordinarily reflect what management expects will be the outcome of specific objectives and strategies. To be reasonable, such assumptions, individually and collectively, also need to be consistent with:

- The general economic environment and the entity's economic circumstances.
- The plans of the entity.
- Assumptions made in prior periods, if relevant.
- Past experience of, or previous conditions experienced by, the entity, to the extent this historical information may be considered representative of future conditions or events.
- Other assumptions used by management relating to the financial statements.

- A69. Because of the nature of fair value measurement, the assumptions may differ from those used in other accounting estimates; consistency among assumptions, however, remains important. For example, the assumptions on which fair value measurements are based may include the discount rate to be used in calculating the present value of future cash flows. In such cases, the auditor may consider, for example, whether there is or should be a relationship or correlation between the interest rates used to discount estimated future cash flows in determining the fair value of an investment property and interest rates on borrowings currently being incurred by the entity to acquire investment property.
- A70. Matters that the auditor may consider in evaluating the reasonableness of assumptions used by management underlying accounting estimates measured at fair value, in addition to those discussed above, may include, for example:
- Whether, and if so how, management has incorporated market-specific inputs into the development of assumptions, where relevant.
 - Whether the assumptions are consistent with observable market conditions, the characteristics of the asset or liability being measured at fair value.
 - Whether the sources of market-participant assumptions are relevant and reliable, and how management has selected the assumptions to use when a number of different market participant assumptions exist.
 - Whether, and if so how, management considered assumptions used in, or information about, comparable transactions, assets or liabilities, where appropriate.
- A71. For all accounting estimates, the assumptions used often reflect management's intent to carry out courses of action relevant to the accounting estimate. Management often documents plans and intentions relevant to specific assets or liabilities and the financial reporting framework may require it to do so. Although the extent of audit evidence to be obtained about management's intent is a matter of professional judgment, the auditor's procedures may include the following:
- Considering management's history of carrying out its stated intentions.
 - Reviewing written plans and other documentation, including, where applicable, formally approved budgets, authorizations, minutes, etc.
 - Considering management's reasons for a particular course of action.
 - Considering management's ability to carry out a particular course of action given the entity's economic circumstances, including the implications of its existing commitments.
- A72. In evaluating the reasonableness of the assumptions supporting an accounting estimate, the auditor may identify one or more significant assumptions. If so, it may indicate that the accounting estimate has high estimation uncertainty and may, therefore, give rise to a significant risk. Additional responses to significant risks are described in paragraphs A89-A102.

Considerations specific to smaller entities

A73. In smaller entities, the making of accounting estimates by management is likely to be less structured than in larger entities. Smaller entities with active management involvement may not need extensive descriptions of accounting procedures, sophisticated accounting records, or written policies. Even if the entity has no established process, it does not mean that management is not able to provide a basis upon which the auditor can test the accounting estimate.

Testing the Operating Effectiveness of Controls (Ref: Para. 10(c))

A74. Testing the operating effectiveness of the controls over how management made the accounting estimate may be an appropriate response when, for example:

- Controls exist for the review and approval of the accounting estimates by appropriate levels of management and, where appropriate, by those charged with governance.
- The accounting estimate is derived from the routine processing of data by the entity's accounting system.

A75. Testing the operating effectiveness of the controls is required however, in accordance with ISA 330, when:

- (a) The auditor's assessment of risks of material misstatement at the assertion level is based on an expectation that controls over the process are operating effectively; or
- (b) Substantive procedures alone do not provide sufficient appropriate audit evidence at the assertion level.

Considerations specific to smaller entities

A76. Controls over the process to make an accounting estimate may exist in smaller entities, but the formality with which they operate varies. Further, smaller entities may determine that certain types of controls are not necessary because of active management involvement in the financial reporting process. In the case of very small entities, however, there may not be many controls that the auditor can identify. For this reason, the auditor's procedures in response to the assessed risks are likely to be substantive in nature, with the auditor performing one or a combination of the other procedures in paragraph 10.

Developing A Point Estimate or Range (Ref: Para. 10(d))

A77. Developing a point estimate or a range to evaluate management's point estimate may be an appropriate response when, for example:

- An accounting estimate is not derived from the routine processing of data by the accounting system.
- The auditor's review of the outcome, or re-estimation, of accounting estimates of a similar nature made in the prior period financial statements suggests that management's current period process is unlikely to be effective.

- The entity's controls within and over management's processes for determining accounting estimates are not well designed or properly implemented.
- Events or transactions between the period end and the date of the auditor's report contradict management's point estimate.
- There are alternative sources of relevant data available to the auditor which can be used in making a point estimate.

A78. Even when the entity's controls are well designed and properly implemented, developing a point estimate or a range may be a more effective or efficient procedure in responding to the assessed risks. In other situations, the auditor may consider performing this procedure as part of determining whether further procedures are necessary and if so, their nature and extent.

A79. The approach taken by the auditor in developing either a point estimate or a range may vary based on what is considered most effective in the circumstances. For example, the auditor may initially develop a preliminary point estimate, and then assess its sensitivity to changes in assumptions to ascertain a range with which to evaluate management's point estimate. Alternatively, the auditor may begin by developing a range for purposes of determining, where possible, a point estimate.

A80. The auditor may develop a point estimate or a range in a number of ways, for example by:

- Using a model, for example, one that is commercially available for use in a particular sector or industry, or a proprietary or auditor-developed model.
- Further developing management's consideration of alternative assumptions or outcomes, for example by introducing a different set of assumptions.
- Employing or engaging an expert with specialized expertise to develop or execute the model, or to provide relevant assumptions.
- Making reference to other comparable conditions, transactions or events, or, where relevant, markets for comparable assets or liabilities.

A81. When the auditor makes a point estimate or a range, the auditor may use assumptions different from those used by management. In such circumstances, the auditor may consider it necessary to, to the extent not already done so:

- Obtain an understanding of management's assumptions in order to establish that the auditor's model takes into account relevant variables, and to be able to understand and evaluate any significant differences from management's point estimate.
- Establish whether the underlying data used in making the point or range estimate is relevant and reliable.

A82. The making of a point estimate or a range by the auditor may reveal that the reliability of an accounting estimate is highly sensitive to certain assumptions and therefore subject to high estimation uncertainty. This may indicate that the accounting estimate is a significant risk.

A83. The auditor may have the necessary skill and knowledge to make a point estimate or a range, or may determine that it is necessary to, or decide to, use the work of an expert. ISA 620,

“Using the Work of an Expert” establishes requirements and provides guidance when using the work of an expert.

A84. The ability of the auditor to make a point estimate, as opposed to a range, depends on several factors, including the model used, the nature and extent of data available and the estimation uncertainty involved with the accounting estimate. Further, the decision to develop a point estimate or range may be influenced by the financial reporting framework, which may prescribe the point estimate that is to be used after consideration of the alternative outcomes and assumptions.

Narrowing the Range

A85. When the auditor develops a range with which to evaluate the reasonableness of management’s point estimate (the ‘auditor’s range’), the range cannot be one that comprises all possible outcomes if it is to be useful. Such a range would be too wide to be effective for purposes of the audit. The auditor’s range is useful and effective when it is sufficiently narrow to enable the auditor to identify a material misstatement.

A86. Narrowing the range to a point where all outcomes within the range are considered reasonable may be achieved by:

- Eliminating from the range those outcomes at the extremities of the range judged by the auditor to be unlikely to occur, and
- Continuing to narrow the range, based on audit evidence available, until the auditor is unable to distinguish a best estimate based upon the relative likelihood of occurrence of the remaining outcomes, and accordingly all outcomes within the range are considered reasonable.

A87. Ordinarily, a range that has been narrowed to be equal to or less than the amount lower than materiality determined for purposes of assessing risks and designing further audit procedures⁴ is adequate for the purposes of evaluating the reasonableness of management’s point estimate. However, particularly in certain industries, it may not be possible to narrow the range to below such an amount. This does not necessarily preclude recognition of the estimate. It may indicate, however, that the estimation uncertainty associated with the estimate is such that it gives rise to a significant risk. Additional responses to significant risks are described in paragraphs A89-A102.

A88. In some rare cases, the auditor may be able to narrow the range until the audit evidence indicates a point estimate that differs from management’s. In such cases, that point estimate is used as the auditor’s point estimate.

Further Substantive Procedures to Respond to Significant Risks (Ref: Para. 11)

A89. ISA 330 requires the auditor to perform substantive procedures that specifically respond to significant risks. In auditing accounting estimates, the auditor’s further substantive procedures are primarily directed towards the evaluation of:

⁴ See ISA 320 (Revised), “Materiality in Planning and Performing an Audit.”

- How management has assessed the effect of estimation uncertainty on the accounting estimate, and the effect such uncertainty may have on the appropriateness of the recognition of the estimate in the financial statements; and
- The adequacy of related disclosures.

Estimation Uncertainty

Management's Consideration of Estimation Uncertainty (Ref: Para. 11(a))

- A90. Management may evaluate alternative assumptions or outcomes of the accounting estimates through a number of methods, depending on the circumstances. One possible method used by management is to undertake a sensitivity analysis. This might involve determining how the monetary amount of an accounting estimate varies with different assumptions. Even for accounting estimates measured at fair value there can be variation because different market participants will use different assumptions. A sensitivity analysis could lead to the development of a number of outcome scenarios, sometimes characterized as a range of outcomes by management, such as "pessimistic" and "optimistic" scenarios.
- A91. A sensitivity analysis may demonstrate that an accounting estimate is not sensitive to changes in particular assumptions. Alternatively, it may demonstrate that the accounting estimate is sensitive to one or more assumptions that then become the focus of the auditor's attention.
- A92. This is not intended to suggest that one particular method of addressing estimation uncertainty (such as sensitivity analysis) is more suitable than another, or that management's consideration of alternative assumptions or outcomes needs to be conducted through a detailed process supported by extensive documentation. Rather, it is whether management has assessed how estimation uncertainty may affect the accounting estimate that is important, not the specific manner in which it is done. Where management has not considered alternative assumptions or outcomes, the auditor may need to request that management support how it has addressed the effects of estimation uncertainty on the accounting estimate.

Considerations specific to smaller entities

- A93. Often, smaller entities may use simpler means to assess the estimation uncertainty. In these circumstances, in addition to the auditor's review of available documentation, the auditor generally obtains audit evidence of management consideration of alternative assumptions or outcomes by inquiry of management. In addition, management may not have the expertise and experience to address the estimation uncertainty of the accounting estimate. In such cases, the auditor may explain to management the process or the different methods available for doing so, and the documentation thereof.

Significant Assumptions (Ref: Para. 11(b))

- A94. The evaluation of significant assumptions for accounting estimates that give rise to significant risks is required because of the influence that such assumptions are likely to have on such estimates. Support for significant assumptions derived from management's knowledge may be obtained from management's continuing processes of strategic analysis and risk management. Even without established processes, such as may be the case in

smaller entities, the auditor may be able to evaluate the assumptions through inquiries of and discussions with management.

- A95. The auditor's considerations in evaluating assumptions made by management, including management's intent and ability, where relevant, are described in paragraphs A65-A73.

Development of a Range (Ref: Para. 12)

- A96. The auditor's considerations in determining a range for this purpose are described in paragraphs A80-A88.

Recognition of the Accounting Estimates in the Financial Statements (Ref: Para. 13 (a))

- A97. Where management has recognized an accounting estimate in the financial statements, the focus of the auditor's evaluation is on whether the recognition criteria of the applicable financial reporting framework have been met. Where the auditor judges that it is the estimation uncertainty associated with an accounting estimate that gives rise to a significant risk, this evaluation focuses on whether the measurement of the accounting estimate is sufficiently reliable to meet the recognition criteria of the applicable financial reporting framework.
- A98. With respect to accounting estimates that have not been recognized, the focus of the auditor's evaluation is on whether the recognition criteria of the applicable financial reporting framework have, in fact, been met. Even where an accounting estimate has not been recognized and the auditor concludes that this treatment is appropriate, there may be need for adequate disclosure of the circumstances in the notes to the financial statements. The auditor may also determine that there is a need to draw the reader's attention to a significant uncertainty by adding an emphasis of matter paragraph to the auditor's report. [Proposed] ISA 706, "Emphasis of Matter Paragraphs and Other Matters Paragraphs in the Independent Auditor's Report," establishes requirements and provides guidance concerning such paragraphs.

Measurement at Fair Value (Ref: Para. 13 (b))

- A99. With respect to fair value measurement, some financial reporting frameworks also presume that fair value can be measured reliably as a prerequisite to either requiring or permitting fair value measurements and disclosures. In some cases, this presumption may be overcome when, for example, there is no appropriate method or basis for measurement. In such cases, the focus of the auditor's evaluation is on whether management's basis for overcoming the presumption relating to the use of fair value set forth under the entity's applicable financial reporting framework is appropriate.

Disclosures of Estimation Uncertainty (Ref: Para. 14)

- A100. The presentation of financial statements in conformity with the applicable financial reporting framework includes adequate disclosure of material matters. In relation to estimates having significant risk, even where the auditor is able to obtain sufficient appropriate audit evidence, the auditor may conclude that estimation uncertainty relating to such estimate needs to be disclosed in light of the circumstances and facts involved; this may be the case, in particular,

when management's point estimate falls within the auditor's range that is greater than the amount lower than materiality determined for purposes of assessing risks and designing further audit procedures.

A101. In some cases, the applicable financial reporting framework may specify additional requirements for disclosures regarding uncertainties. For example, some financial reporting frameworks prescribe:

- The disclosure of key assumptions and other sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities. Such requirements may be described using terms such as "Key Sources of Estimation Uncertainty" or "Critical Accounting Estimates."
- The disclosures of the range of possible outcomes, and the assumptions used in determining the range.

A102. Where the applicable financial reporting framework does not prescribe disclosure of estimation uncertainty, the auditor may consider it appropriate to encourage management to describe, in the notes to the financial statements, the circumstances relating to the estimation uncertainty. [Proposed] ISA 705, "Modifications to the Opinion in the Independent Auditor's Report" provides guidance on the implications for the auditor's report when the auditor believes that management's disclosure of estimation uncertainty in the financial statements is inadequate or misleading.

Evaluating the Reasonableness of the Accounting Estimates and Related Disclosures, and Determining Misstatements (Ref: Para. 15)

A103. Based on the audit evidence obtained, the auditor may conclude that the evidence points to an estimate that differs from management's point estimate. In such cases, where the auditor has developed a range, a misstatement exists when management's point estimate lies outside the auditor's range. The misstatement is measured as the difference between management's point estimate and the nearest point of the auditor's range. Where the audit evidence supports a point estimate, the difference between the auditor's point estimate and management's point estimate constitutes a financial statement misstatement.

A104. Where management has changed an accounting estimate from the prior period based on a subjective assessment that there has been a change in circumstances, the auditor may conclude based on the audit evidence that the accounting estimate is misstated as a result of an arbitrary change by management, or may regard it as an indicator of possible management bias (see paragraphs A108-A109).

A105. A misstatement, whether caused by fraud or error, may arise as a result of:

- Misstatements about which there is no doubt (factual misstatements).
- Differences arising from management's judgments concerning accounting estimates that the auditor considers unreasonable (judgmental misstatements).
- Projecting misstatements identified in audit samples to the entire populations from which the samples were drawn (projected misstatements).

In some cases, a misstatement could arise as a result of a combination of these circumstances, making separate identification difficult or impossible. ISA 450, “Evaluation of Misstatements Identified during the Audit” provides guidance on distinguishing misstatements for purposes of the auditor’s evaluation of the effect of uncorrected misstatements on the financial statement.

A106. In some cases, it may not be possible for the auditor to obtain sufficient appropriate audit evidence about an accounting estimate that could be material to the financial statements. [Proposed] ISA 705 establishes requirements and provides guidance regarding expressing either a qualified opinion or disclaimer of opinion in these circumstances.

A107. Evaluating the reasonableness of accounting estimates and related disclosures included in the notes to the financial statements, whether required by the applicable financial reporting framework or disclosed voluntarily, involves essentially the same types of considerations applied when auditing an accounting estimate recognized in the financial statements.

Indicators of Possible Management Bias (Ref: Para. 16)

A108. The judgments and decisions made by management may give rise to indicators of possible management bias. Such indicators do not themselves constitute misstatements for the purposes of drawing conclusions on the reasonableness of individual accounting estimates. They may, however, affect the auditor’s conclusion as to whether the auditor’s risk assessment and related responses remain appropriate, and the auditor may need to consider the implications for the rest of the audit. Further, they may affect the auditor’s evaluation of whether the financial statements as a whole are free from material misstatement, as discussed in ISA 450.

A109. Examples of indicators of possible management bias with respect to accounting estimates include:

- Changes in an accounting estimate where management has made a subjective assessment that there has been a change in circumstances.
- Selection or construction of significant assumptions that yield a point estimate favorable for management objectives.
- Selection of a point estimate by management such that the outcome scenario is indicative of a pattern when considered in conjunction with the optimism or pessimism of other accounting estimates.

Management Representations (Ref: Para. 17)

A110. ISA 580, “Management Representations” discusses the use of management representations. Depending on the nature, materiality and extent of estimation uncertainty, management representations about accounting estimates recognized or disclosed in the financial statements may include representations:

- About the appropriateness of the measurement processes, including related assumptions, used by management in determining accounting estimates in the context of the applicable financial reporting framework, and the consistency in application of the processes.

- That the assumptions appropriately reflect management's intent and ability to carry out specific courses of action on behalf of the entity, where relevant to the accounting estimates and disclosures.
- That disclosures related to accounting estimates are complete and appropriate under the entity's financial reporting framework.
- That no subsequent events require adjustment to the accounting estimates and disclosures included in the financial statements.

A111. Where applicable, management representations may also include representations about:

- The appropriateness of the basis used by management to determine that the recognition criteria of the applicable financial reporting framework have not been met, for those accounting estimates not recognized or disclosed in the financial statements.
- The appropriateness of the basis used by management to overcome the presumption relating to the use of fair value set forth under the entity's applicable financial reporting framework, for those accounting estimates not measured or disclosed at fair value.

Documentation

Auditor's Conclusion (Ref: Para. 18 (a))

A112. The auditor's documentation of the following is carried out as part of the documentation requirements of ISA 315 and ISA 330:

- (a) The results of the auditor's risk assessment procedures.
- (b) The assessed risks of material misstatement of accounting estimates at the assertion level, and the nature, timing and extent of further audit procedures responsive to the assessed risks.
- (c) The results of tests of controls and substantive procedures responsive to significant risks.

Indicators of Possible Management Bias (Ref: Para. 18 (b))

A113. The auditor's documentation of indicators of possible management bias may include those that come to the auditor's attention and that, either individually or collectively, are relevant to the auditor's conclusion as to whether the auditor's risk assessment and related responses remain appropriate, or to the auditor's evaluation of whether the financial statements as a whole are free from material misstatement. See paragraph A109 for examples of indicators of possible management bias with respect to accounting estimates that the auditor may document.

Appendix

The purpose of this appendix is only to provide a general discussion of fair value measurements and disclosures under different financial reporting frameworks, for background and context.

Fair Value Measurements and Disclosures Under Different Financial Reporting Frameworks

1. Different financial reporting frameworks require or permit a variety of fair value measurements and disclosures in financial statements. They also vary in the level of guidance that they provide on the basis for measuring assets and liabilities or the related disclosures. Some financial reporting frameworks give prescriptive guidance, others give general guidance, and some give no guidance at all. In addition, certain industry-specific measurement and disclosure practices for fair values also exist.
2. Definitions of fair value may differ among financial reporting frameworks, or for different assets, liabilities or disclosures within a particular framework. For example, International Accounting Standard (IAS) 39, “Financial Instruments: Recognition and Measurement” defines fair value as “the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length transaction.” The concept of fair value ordinarily assumes a current transaction, rather than settlement at some past or future date. Accordingly, the process of measuring fair value would be a search for the estimated price at which that transaction would occur. Additionally, different financial reporting frameworks may use such terms as “entity-specific value,” “value in use,” or similar terms, but may still fall within the concept of fair value in this ISA.
3. Financial reporting frameworks may treat changes in fair value measurements that occur over time in different ways. For example, a particular financial reporting framework may require that changes in fair value measurements of certain assets or liabilities be reflected directly in equity, while such changes might be reflected in income under another framework. In some frameworks, the determination of whether to use fair value accounting or how it is applied is influenced by management’s intent to carry out certain courses of action with respect to the specific asset or liability.
4. Different financial reporting frameworks may require certain specific fair value measurements and disclosures in financial statements and prescribe or permit them in varying degrees. The financial reporting frameworks may:
 - Prescribe measurement, presentation and disclosure requirements for certain information included in the financial statements or for information disclosed in notes to financial statements or presented as supplementary information;
 - Permit certain measurements using fair values at the option of an entity or only when certain criteria have been met;
 - Prescribe a specific method for determining fair value, for example, through the use of an independent appraisal or specified ways of using discounted cash flows;

- Permit a choice of method for determining fair value from among several alternative methods (the criteria for selection may or may not be provided by the financial reporting framework); or
 - Provide no guidance on the fair value measurements or disclosures of fair value other than their use being evident through custom or practice, for example, an industry practice.
5. Some financial reporting frameworks presume that fair value can be measured reliably for assets or liabilities as a prerequisite to either requiring or permitting fair value measurements or disclosures. In some cases, this presumption may be overcome when an asset or liability does not have a quoted market price in an active market and for which other methods of reasonably estimating fair value are clearly inappropriate or unworkable.
 6. Some financial reporting frameworks require certain specified adjustments or modifications to valuation information, or other considerations unique to a particular asset or liability. For example, accounting for investment properties may require adjustments to be made to an appraised market value, such as adjustments for estimated closing costs on sale, adjustments related to the property's condition and location, and other matters. Similarly, if the market for a particular asset is not an active market, published price quotations may have to be adjusted or modified to arrive at a more suitable measure of fair value. For example, quoted market prices may not be indicative of fair value if there is infrequent activity in the market, the market is not well established, or small volumes of units are traded relative to the aggregate number of trading units in existence. Accordingly, such market prices may have to be adjusted or modified. Alternative sources of market information may be needed to make such adjustments or modifications. Further, in some cases, collateral assigned (for example, when collateral is assigned for certain types of investment in debt) may need to be considered in determining the fair value or possible impairment of an asset or liability.
 7. In most financial reporting frameworks, underlying the concept of fair value measurements is a presumption that the entity is a going concern without any intention or need to liquidate, curtail materially the scale of its operations, or undertake a transaction on adverse terms. Therefore, in this case, fair value would not be the amount that an entity would receive or pay in a forced transaction, involuntary liquidation, or distress sale. An entity, however, may need to take its current economic or operating situation into account in determining the fair values of its assets and liabilities if prescribed or permitted to do so by its financial reporting framework and such framework may or may not specify how that is done. For example, management's plan to dispose of an asset on an accelerated basis to meet specific business objectives may be relevant to the determination of the fair value of that asset.

Prevalence of Fair Value Measurements

8. Measurements and disclosures based on fair value are becoming increasingly prevalent in financial reporting frameworks. Fair values may occur in, and affect the determination of, financial statements in a number of ways, including the measurement at fair value of the following:

- Specific assets or liabilities, such as marketable securities or liabilities to settle an obligation under a financial instrument, routinely or periodically “marked-to-market.”
- Specific components of equity, for example when accounting for the recognition, measurement and presentation of certain financial instruments with equity features, such as a bond convertible by the holder into common shares of the issuer.
- Specific assets or liabilities acquired in a business combination. For example, the initial determination of goodwill arising on the purchase of an entity in a business combination usually is based on the fair value measurement of the identifiable assets and liabilities acquired and the fair value of the consideration given.
- Specific assets or liabilities adjusted to fair value on a one-time basis. Some financial reporting frameworks may require the use of a fair value measurement to quantify an adjustment to an asset or a group of assets as part of an asset impairment determination, for example, a test of impairment of goodwill acquired in a business combination based on the fair value of a defined operating entity or reporting unit, the value of which is then allocated among the entity’s or unit’s group of assets and liabilities in order to derive an implied goodwill for comparison to the recorded goodwill.
- Aggregations of assets and liabilities. In some circumstances, the measurement of a class or group of assets or liabilities calls for an aggregation of fair values of some of the individual assets or liabilities in such class or group. For example, under an entity’s applicable financial reporting framework, the measurement of a diversified loan portfolio might be determined based on the fair value of some categories of loans comprising the portfolio.
- Information disclosed in notes to financial statements or presented as supplementary information, but not recognized in the financial statements.