

PROPOSED REVISED INTERNATIONAL STANDARD ON AUDITING 540

**AUDITING ACCOUNTING ESTIMATES AND RELATED DISCLOSURES
(EXCLUDING THOSE INVOLVING FAIR VALUE MEASUREMENTS AND
DISCLOSURES)**

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International Standard on Auditing (ISA) 540, “Auditing Accounting Estimates and Related Disclosures” should be read in the context of the “Preface to the International Standards on Quality Control, Auditing, Assurance and Related Services,” which sets out the application and authority of ISAs.

Introduction

1. The purpose of this International Standard on Auditing (ISA) is to establish standards and provide guidance on auditing accounting estimates and related disclosures, excluding those involving fair value measurements, and disclosures. An “accounting estimate” is an approximation of a monetary amount in the absence of a precise means of measurement. Making an accounting estimate frequently requires management to develop assumptions about the outcome of future conditions, transactions or events that are highly uncertain at the time of the estimation. “Estimation uncertainty” is the susceptibility of a financial statement item to a lack of precision in its measurement because the outcome of future events is not known.
2. The term “accounting estimate” describes items recognized or disclosed in the financial statements. For example, accounting estimates may be required of:
 - Bad debts.
 - Inventory obsolescence.
 - Warranty obligations.
 - Environmental remediation costs.
3. Some financial reporting frameworks require certain assets, liabilities or specific components of equity to be measured at fair value. ISA 545, “Auditing Fair Value Measurements and Disclosures” provides standards and guidance on auditing accounting estimates involving such fair value measurements.
4. **The auditor should obtain sufficient appropriate audit evidence to evaluate the reasonableness of accounting estimates and related disclosures made by management, in the context of the entity’s applicable financial reporting framework.**
5. Because of the uncertainties inherent in business activities some financial statement items cannot be measured with precision but can only be estimated. Estimation involves judgments based on the latest available reliable information. Financial reporting frameworks do not always specify a precise way in which particular accounting estimates should be measured; indeed many acknowledge that the use of reasonable estimates is an essential part of the preparation of financial statements.
6. Management is responsible for making accounting estimates and, where necessary, establishing financial reporting processes for measuring them, including adequate internal controls. Such processes include:
 - Selecting appropriate accounting policies and prescribing estimation processes.
 - Developing assumptions about future conditions, transactions or events that affect accounting estimates.
 - Periodically reviewing the circumstances that give rise to the accounting estimates and re-estimating the accounting estimates as necessary.

7. Management is also responsible for accounting for changes to accounting estimates that arise from changes in the circumstances on which an accounting estimate was based, or as a result of new information or more experience. Many financial reporting frameworks recognize that such a revision does not relate to prior periods and is not the correction of a misstatement of a prior period.
8. Financial reporting frameworks often call for neutrality, that is, freedom from bias. Accounting estimates are, however, usually imprecise, and management may be motivated to bias accounting estimates to achieve a predetermined result. When performing audit procedures, the auditor is therefore alert to indicators of possible management bias¹ in the making of accounting estimates.

Risk Assessment Procedures

9. ISA 315, “Understanding the Entity and its Environment and Assessing the Risks of Material Misstatement”, requires the auditor to obtain an understanding of the entity and its environment, including its internal control, sufficient to identify and assess the risks of material misstatement of the financial statements whether due to fraud or error, and design and perform further procedures. The auditor obtains this understanding by performing risk assessment procedures, which calls for gathering, updating and analyzing information throughout the audit. Through obtaining this understanding the auditor is able to use judgment to determine those accounting estimates that are significant in the context of the entity’s financial statements. In this ISA these accounting estimates are described as “significant accounting estimates”.
10. **The auditor should perform risk assessment procedures to identify accounting estimates for which there is a risk of material misstatement, by:**
 - (a) **Obtaining an understanding of the requirements of the entity’s applicable financial reporting framework;**
 - (b) **Obtaining an understanding of how management identifies those transactions, events and conditions that may give rise to the need for accounting estimates in the financial statements;**
 - (c) **Obtaining an understanding of the processes, including relevant internal controls, used to make significant accounting estimates, including the assumptions underlying them and whether and, if so how, management has assessed the effect of estimation uncertainty; and**
 - (d) **Reviewing the outcome, or re-estimation, of significant accounting estimates made in the prior period financial statements.**

¹ In this ISA, the word “bias” has the meaning attached to it in the “Framework for the Preparation and Presentation of Financial Statements” issued by the IASB. Paragraph 36 of the Framework states, “To be reliable, the information contained in financial statements must be neutral, that is free from bias. Financial statements are not neutral if, by the selection or presentation of information, they influence the making of a decision or judgment in order to achieve a predetermined result or outcome”.

UNDERSTANDING THE REQUIREMENTS OF THE FINANCIAL REPORTING FRAMEWORK

11. 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.
12. When an accounting estimate is recognized in financial statements, management determines a single monetary amount representing its judgment about the most likely outcome of the uncertain future conditions, transactions or events that led it to make the accounting estimate. Such a single monetary amount is referred to as a “point estimate”. With respect to some accounting estimates there may be a range of outcomes from which management is able to select a point estimate. Accounting frameworks may, or may not, provide guidance for management on selecting point estimates from within the range of outcomes.
13. “Estimation uncertainty” is the susceptibility of a financial statement item to a lack of precision in its measurement because the outcome of future events is not known. Factors affecting estimation uncertainty include:
 - The extent to which the accuracy of an accounting estimate depends on management’s judgment about the outcome of uncertain future conditions, transactions or events.
 - The degree of sensitivity of the accounting estimate to changes in assumptions.
 - The existence of recognized measurement techniques that may mitigate the estimation uncertainty.
14. Some accounting estimates are highly sensitive to changes in assumptions such that the use of different assumptions could materially affect the accounting estimate recognized in the entity’s financial statements. With respect to such accounting estimates, financial reporting frameworks may require the disclosure of information on the key assumptions to which the estimate is particularly sensitive. An assumption in respect of which an accounting estimate is highly sensitive is referred to as a “significant assumption”.
15. The sensitivity of an accounting estimate to changes in assumptions may be so great that a reliable estimate cannot be made. In such instances, financial reporting frameworks often do not permit an accounting estimate to be recognized in the financial statements, but disclosures may be required in the notes to the financial statements.

MANAGEMENT’S IDENTIFICATION OF ACCOUNTING ESTIMATES

16. Although management’s identification of transactions, events and conditions that give rise to the need for accounting estimates is likely to be based on their cumulative experience of preparing the entity’s financial statements in previous periods, the auditor inquires whether management has given consideration to changes in circumstances such as:
 - The entity may have engaged in new types of transactions that give rise to accounting estimates.
 - Terms of transactions that gave rise to accounting estimates may have changed.
 - The requirements of the applicable financial reporting framework may have changed.

- Regulatory or other changes outside the control of management may require management to revise, or make new, accounting estimates.
 - New conditions or events that give rise to accounting estimates.
17. 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. If so, the auditor considers whether the entity's risk assessment procedures should have identified them. If they should have, the auditor considers why those procedures failed to do so. ISA 315 provides guidance when the auditor identifies material weaknesses in the entity's risk assessment processes.

MANAGEMENT'S PROCESS FOR MAKING ACCOUNTING ESTIMATES

18. To obtain an understanding of management's process for making accounting estimates, the auditor considers, for example:
- The types of accounts or transactions to which the accounting estimates relate (for example, whether the accounting estimates arise from the recording of routine and recurring transactions or whether they arise from non-recurring or unusual transactions).
 - The experience and competence of those who determine the accounting estimates, including any use of experts within or outside the entity.
 - How management ensures the completeness, relevance and accuracy of the data used to develop accounting estimates.
 - The assumptions underlying the estimates and how management ensures that all significant accounting estimates are based on assumptions that are internally consistent, and conform to the entity's business plans and the external environment.
 - Whether management has performed a sensitivity analysis to determine the effect on an accounting estimate of changes in the assumptions.
 - How management determines the accounting estimate when their sensitivity analysis concludes that there may be a number of outcome scenarios.
 - Whether management monitors the outcome of accounting estimates made in the prior period
 - Internal controls over the accounting estimation process.
19. Assumptions are usually required to support accounting estimates that are highly dependent upon management's judgment about the outcome of uncertain future conditions, transactions or events. Accounting estimates based on such judgments can be influenced by management's attitudes and motivations. The auditor therefore obtains an understanding of the controls for reviewing and approving accounting estimates by appropriate levels of management and, where appropriate, those charged with governance. The auditor also obtains an understanding of how management ensures that assumptions are internally consistent.

REVIEWING THE OUTCOME OR RE-ESTIMATION OF PRIOR PERIOD ACCOUNTING ESTIMATES

20. The auditor's review of the outcome, or re-estimation, of significant accounting estimates made in the prior period financial statements is usually carried out in conjunction with the retrospective review of significant accounting estimates described in paragraph 80(b) of ISA 240, "The Auditor's Responsibility to Consider Fraud in an Audit of Financial Statements".
21. The actual outcome of the condition, transaction or event that gave rise to an accounting estimate will often differ from the accounting estimate recognized in the prior period financial statements. This does not necessarily mean that there was a misstatement in the prior period's financial statements. By understanding the reasons for any variance between the actual outcome and the prior period's accounting estimate, however, the auditor:
- (a) Obtains information regarding the effectiveness of management's prior period estimation process, from which the auditor can judge the likely effectiveness of management's current period process;
 - (b) Obtains audit evidence that is pertinent to the re-estimation, in the current period, of prior period accounting estimates: and
 - (c) Obtains audit evidence of matters, such as estimation uncertainty, that may be required to be disclosed in the financial statements.
22. A change in an accounting estimate that results from new information or new developments does not represent the correction of a misstatement² in the prior period's financial statements. Subsequent changes in accounting estimates arising from information that:
- (a) Was available to management when the prior period's financial statements were finalized; or
 - (b) Could reasonably be expected to have been obtained and taken into account in preparing and presenting those financial statements,
- do, however, provide evidence of misstatements in previous period financial statements. Such misstatements include the effects of mathematical mistakes, mistakes in applying accounting policies, oversights or misinterpretation of facts, and fraud. Many financial reporting frameworks contain guidance on distinguishing between changes in accounting estimates that constitute misstatements and changes in accounting estimates that do not constitute misstatements.

Assessment of the Risks of Material Misstatement

23. **Using information gathered from the risk assessment procedures, the auditor should identify and assess the risks of material misstatement for accounting estimates at the assertion level, and determine if any identified risks are significant risks that require special audit consideration.**
24. ISA 315 requires the auditor, as part of the risk assessment, to determine which of the identified risks are, in the auditor's judgment, risks that require special audit consideration. Accounting

² Such misstatements are sometimes referred to as "errors" in financial reporting frameworks.

estimates with high estimation uncertainty are likely to require special audit consideration. Such risks are described as “significant risks”.

25. If the estimation uncertainty is so high that a reasonable estimate cannot be made, the applicable financial reporting framework may preclude recognition of the item being estimated in the balance sheet or income statement. In such circumstances the auditor considers whether the financial reporting framework requires disclosure of such accounting estimates in the notes to the financial statements. As disclosure of information about such accounting estimates is relevant to the evaluation of the financial position, performance and changes in financial position of an entity by the users of the financial statements the risks associated with such accounting estimates are significant risks.
26. Factors that cause high estimation uncertainty include:
 - Accounting estimates that are highly dependent upon management’s judgment of the outcome of uncertain future conditions, transactions or events.
 - Accounting estimates that are not capable of being calculated from generally accepted techniques or derived with some degree of precision from available data.
 - Internal controls over management’s processes to determine the accounting estimates are weak or susceptible to override.
 - The auditor’s review of the outcome, or re-estimation, of significant accounting estimates made in the prior period financial statements suggests that management’s current period process is unlikely to be effective.
 - Accounting estimates involve a small population of items having dissimilar probabilities of final outcome.

Responses to the Risks of Material Misstatement

27. **The auditor should design and perform further audit procedures whose nature, timing, and extent respond to the assessed risks of material misstatement of accounting estimates at the assertion level.**
28. ISA 330 “The Auditor’s Procedures in Response to Assessed Risks” addresses the auditor’s responses at both the financial statement and assertion levels. This ISA focuses on specific responses at the assertion level only.

EVENTS BETWEEN PERIOD END AND THE DATE OF THE AUDITOR’S REPORT

29. **For accounting estimates that the auditor has identified and assessed as having risks of material misstatement, the auditor should determine whether events occurring between the period end and the date of the auditor’s report confirm, or contradict, the accounting estimate.**
30. Transactions and events that occur after the period end, but prior to completion of the audit, may provide audit evidence regarding the measurement of an accounting estimate. When such events confirm the accounting estimate made, they may remove the need to perform additional

audit procedures. 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. If the entire inventory has been sold the audit evidence may be conclusive. However, where the entire inventory has not been sold the auditor is cautious about drawing conclusions about the net realizable value of the entire inventory based on evidence relating to a sale of only part of the inventory. When such events contradict the accounting estimate made the auditor considers whether this may be indicative of management having ineffective processes over the making of accounting estimates.

31. **If confirming transactions or events are not expected to occur between the period end and the date of the auditor's report, the auditor should perform one or more of the following procedures:**
- (a) **Test management's process to make the accounting estimate, to establish that it operated in accordance with the auditor's understanding.**
 - (b) **Test the operating effectiveness of the controls over management's process for making the accounting estimate, together with appropriate substantive procedures.**
 - (c) **Make, or use an expert to make, an independent estimate for comparison with management's accounting estimate.**

TESTING MANAGEMENT'S PROCESS

32. Testing the process used by management to develop the accounting estimate is likely to 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.
33. Testing the process used to make the accounting estimate involves:
- (a) Testing whether the internal data on which the accounting estimate is based, is accurate, complete and relevant;
 - (b) Verifying the source of relevant external data;
 - (c) Mathematical re-computation and reviewing information for internal consistency;
 - (d) Considering whether the significant assumptions made by management provide a reasonable basis for the accounting estimate;
 - (e) Considering management's approval processes; and
 - (f) Considering whether there are any indicators of possible management bias in the making of the accounting estimate.

34. In developing many accounting estimates, management makes assumptions about matters both within and outside its control. Examples of assumptions outside the control of management include: interest rates, exchange rates, mortality rates, inflation rates, and potential judicial or regulatory actions.
35. The auditor considers the assumptions, collectively and individually, in evaluating whether they reasonably support the accounting estimates. Assumptions are frequently interdependent, and therefore need to be internally consistent. An assumption that may appear reasonable when taken in isolation may not be reasonable when used in conjunction with other assumptions. Assumptions made by an expert used by management to assist in making accounting estimates are treated as though they were management's.
36. Support for significant assumptions can usually be obtained from management's continuing processes of strategic analysis and risk management. Even without formalized processes, the auditor may be able to evaluate the assumptions through inquiries of management and external corroborative procedures such as obtaining confirmations from legal counsel.
37. The auditor's consideration of management's assumptions can only be based on information available to the auditor. 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 management's assumptions underlying the accounting estimates and disclosures.
38. The auditor's testing of the process used to develop an accounting estimate may suggest or establish that its reliability is highly dependent on management's assumptions, indicating that the accounting estimate may give rise to a significant risk. Additional responses to significant risks are described in paragraphs 47 to 62.

TESTING THE OPERATING EFFECTIVENESS OF THE CONTROLS OVER THE PROCESS

39. The standards in ISA 330 require the auditor to perform tests of control 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. As described in more detail in paragraphs 115 to 118 of ISA 315, audit evidence may be available only in electronic form such that its sufficiency and appropriateness depend on the effectiveness of controls over its accuracy and completeness.
40. Testing the operating effectiveness of the controls over the process is likely to 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.
41. When performing tests of the operating effectiveness of controls, the auditor obtains audit evidence that controls operate effectively. This includes obtaining audit evidence about how controls were applied at relevant times during the audit, the consistency with which they were applied, and by whom or by what means they were applied. Guidance on testing controls is set out in paragraphs 28 to 47 of ISA 330.
42. The auditor may conclude from testing the operating effectiveness of internal controls over the development of an accounting estimate that such controls are so weak or so susceptible to management override that the accounting estimate gives rise to a significant risk. Additional responses to significant risks are described in paragraphs 47 to 62.

MAKE AN INDEPENDENT ESTIMATE

43. Making an independent estimate (for example by using an auditor-developed model) to compare with management's accounting estimate is likely to 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 the accounting estimate.
44. When making an independent estimate the auditor may use assumptions different from those used by management. In these circumstances the auditor still obtains an understanding of management's assumptions in order to establish that the auditor's model takes account of all the significant variables. The auditor also tests the underlying internal data when the auditor uses such internal data to make the independent estimate.
45. The auditor may have the necessary skill and knowledge to make an independent estimate or may decide to use the work of an expert. When using the work of an expert, the auditor obtains sufficient appropriate audit evidence that such work is adequate for the purposes of the audit, and complies with the requirements of ISA 620 "Using the work of an expert".
46. An independent estimate may reveal that the reliability of an accounting estimate is highly sensitive to assumptions and therefore subject to high measurement uncertainty. This would indicate that the accounting estimate gives rise to a significant risk. Additional responses to significant risks are described in paragraphs 47 to 62.

Responses to Significant Risks

47. With respect to accounting estimates that the auditor has identified as giving rise to significant risks, it is possible that events and transactions occurring between period end and the date of the auditor's report may confirm the accounting estimate and thus mitigate or eliminate the significant risk.
48. The auditor, therefore, evaluates whether confirming transactions or events identified in meeting the requirements of paragraph 29 mitigate or eliminate significant risks identified by the auditor as part of the risk assessment procedures.
49. **Where significant risks have not been mitigated or eliminated by confirming events, the auditor should, in addition to meeting the requirements of paragraph 31:**
 - (a) **To the extent not already done, evaluate the design of the entity's controls, including relevant control procedures, and determine whether they have been implemented (Paragraph 113 of ISA 315);**
 - (b) **Obtains the audit evidence about the operating effectiveness of internal controls (on which the auditor plans to rely) from tests of control performed in the current period³ (Paragraph 44 of ISA 330); and**
 - (c) **Performs substantive procedures that specifically respond to the significant risks (Paragraphs 50 to 62).**

Substantive Procedures to Respond to Significant Risks

50. **For accounting estimates that give rise to significant risks, the auditor should determine whether there is adequate support for management's point estimate by evaluating:**
 - (a) **Whether the significant assumptions made by management taken individually, and as a whole, provide a reasonable basis for the accounting estimate; and**
 - (b) **Whether and how management has considered alternative assumptions or outcomes, and why they have rejected them.**

EVALUATING THE SIGNIFICANT ASSUMPTIONS

51. The auditor's evaluation of significant assumptions builds on the audit procedures described in paragraphs 34 to 37. The significant assumptions 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. While the extent of audit evidence to be obtained about management's intent is a matter of professional judgment, the auditor's procedures ordinarily include:

- 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.

³ Such audit evidence is obtained only when the auditor has adopted an approach of, "testing the operating effectiveness of the controls over management's process for making the accounting estimate", described in paragraphs 31(b) and 39 to 42.

- Considering management's stated 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.

EVALUATING WHETHER AND HOW MANAGEMENT HAS CONSIDERED ALTERNATIVE ASSUMPTIONS OR OUTCOMES

52. The auditor obtains audit evidence to draw reasonable conclusions concerning the adequacy of management's support for a point estimate from understanding management's process for evaluating alternative assumptions or outcomes, and management's reasoning for selecting the point estimate and rejecting other alternatives.
53. Management may evaluate alternative assumptions or outcomes by applying a sensitivity analysis. Such a sensitivity analysis might involve determining the degree of variation in the monetary amount of an accounting estimate from varying assumptions. A sensitivity analysis could lead to the development of a number of outcome scenarios that may be considered to be, for example, pessimistic, optimistic or likely.
54. A sensitivity analysis may demonstrate that the outcome of an accounting estimate is not sensitive to changes in particular assumptions. Alternatively, it may demonstrate that the outcome is sensitive to one or more particular assumptions that then become the focus of the auditors' attention.
55. In order to determine the most likely outcome scenario, management may assign probabilities to the likelihood of various scenarios being the actual outcome. The most likely outcome is the point estimate that is recognized by management in the financial statements. The auditor evaluates the rigor with which management determined the most likely outcome scenario

CONCLUDING ON THE REASONABLENESS OF THE ACCOUNTING ESTIMATE

56. Management is responsible for supporting how it has determined an accounting estimate. If the auditor believes, based on audit procedures undertaken that management has not adequately supported the accounting estimate, the auditor requests management to perform further work to provide persuasive evidence to support the recognition of the point estimate. Management may need to engage an expert to assist in obtaining the support, or management may need to perform analysis of data or obtain information from industry or other sources to support its view.
57. If management does not perform such further work, or if the auditor believes that management has failed to consider evidence that is reasonably available to it, the auditor concludes that management has not adequately supported a point estimate. Such a conclusion is likely to be drawn especially when, an estimate is sensitive to assumptions and, the auditor is not satisfied that management determined the most likely outcome scenario with sufficient rigor.
58. **If the auditor concludes that management has not adequately supported a point estimate, the auditor should develop a "reasonable range of outcomes" with which to evaluate the reasonableness of management's point estimate.**

59. A “reasonable range of outcomes” is a range that does not include high and low outcome values whose likelihood of occurrence is judged, by the auditor, to be remote or otherwise “less likely to occur than not”.
60. The auditor may develop a reasonable range of outcomes in a number of ways. The auditor may:
- (a) Use a model, proprietary or commercial, into which the auditor introduces entity-specific data; or
 - (b) Further develop management’s sensitivity analysis by applying greater rigor to determining the most likely outcome scenario; or
 - (c) Employ or engage an expert with specialized expertise to develop or execute the model, or to provide relevant assumptions.
61. In determining a reasonable range of outcomes, the auditor takes into account considerations similar to those that apply to the making of an independent accounting estimate described in paragraphs 43 to 46. In particular, if management’s point estimate is not within the auditor’s reasonable range of outcomes, the auditor seeks to understand why.
62. The auditor may conclude from these audit procedures that management’s accounting estimate is reasonable in the context of the applicable financial reporting framework. This would be the case when management’s point estimate was within the reasonable range of outcomes determined by the auditor. Alternatively, the auditor may conclude that the evidence points to an estimate that differs from management’s, and that the difference between the auditor’s estimate and management’s estimate constitutes a financial statement misstatement.

Evaluating the Reliability of the Measurement of the Accounting Estimate

63. **For accounting estimates that give rise to significant risks, the auditor should evaluate whether the audit evidence obtained is sufficient to support management’s judgment that its measurement of the accounting estimate is sufficiently reliable to warrant recognizing the accounting estimate.**
64. The auditor evaluates the sufficiency of audit evidence supporting management’s judgments about the appropriateness of recognizing an accounting estimate. Where management has recognized an accounting estimate in the financial statements, the auditor evaluates whether its measurement is sufficiently reliable to meet the recognition criteria of the applicable financial reporting framework. The auditor also evaluates whether the measurement of an accounting estimate that has not been recognized is, in fact, sufficiently reliable to meet the recognition criteria of the applicable financial reporting framework.
65. With respect to accounting estimates that have not been recognized the auditor considers the adequacy of the disclosures in the notes to the financial statements and whether the auditor’s report needs to be modified, to draw the reader’s attention to the significant uncertainty, by adding an emphasis of matter paragraph. ISA 700 “The Auditor’s Report on Financial Statements” provides standards and guidance concerning such paragraphs.

Evaluating Audit Evidence and Determining Misstatements

66. **The auditor should evaluate the sufficiency and appropriateness of the audit evidence to determine whether significant accounting estimates and related disclosures are reasonable in the context of the entity's applicable financial reporting framework, or are misstated.**
67. This ISA provides standards and guidance on the auditor's determination and documentation of misstatements relating to accounting estimates. This ISA does not, however, provide the auditor with standards and guidance on evaluating such misstatements. [Proposed revised] ISA 320, "Materiality in the Identification and Evaluation of Misstatements" provides standards and guidance on the auditor's evaluation of the effect on the financial statements of all misstatements identified during the audit, including those relating to accounting estimates.
68. [Proposed revised] ISA 320 divides misstatements into the following categories:
- (a) Known misstatements;
 - (i) Misstatements of fact;
 - (ii) Misstatements involving subjective decisions; and
 - (b) Likely misstatements.

The following paragraphs provide the auditor with guidance on classifying misstatements relating to accounting estimates.

KNOWN MISSTATEMENTS – MISSTATEMENTS OF FACT

69. A misstatement of fact relating to an accounting estimate is found to exist if the auditor obtains audit evidence that, in making an accounting estimate, management has:
- (a) Made mistakes in gathering or processing data;
 - (b) Not followed the requirements of the applicable financial reporting framework; or
 - (c) Misinterpreted or overlooked facts.

KNOWN MISSTATEMENTS - MISSTATEMENTS INVOLVING SUBJECTIVE DECISIONS

70. A misstatement involving subjective decisions arises from differences between management's and the auditor's judgment concerning the reasonableness of accounting estimates, in the context of the applicable financial reporting framework. Such misstatements differ from misstatements of fact because the audit evidence is often less persuasive.
71. As discussed in paragraphs 59 to 64, where management has not adequately supported a best estimate, the auditor develops a reasonable range of outcomes with which to evaluate the reasonableness of management's point estimate. If the auditor is able to make a probability assessment concerning the likelihood of various outcomes within the reasonable range being the actual outcome, the known misstatement involving subjective decision is the difference between management's point estimate and the auditor's point estimate. This applies regardless of whether management's point estimate falls inside or outside the auditor's reasonable range of outcomes.

72. If the auditor is unable to make an assessment concerning the likelihood of outcomes within the reasonable range of outcomes, the auditor presumes that each outcome within the range is equally likely to occur. In that case, the auditor concludes that an accounting estimate is not misstated if it falls within the range and the relative location of the accounting estimate within the range has not changed from the prior period.
73. If management's accounting estimate lies outside the auditor's reasonable range of outcomes, where each outcome is equally likely to occur, there is a known misstatement involving subjective decisions of, at least, the difference between management's accounting estimate and the nearest point of the reasonable range.

Management changes the location of an accounting estimate within the reasonable range of outcomes from period to period

74. With reference to the situation described in paragraph 71, an accounting estimate is misstated if, without good reason, management changes the relative location of the accounting estimate within the reasonable range from the prior period. For example, management may, without good reason, change its recognition of a warranty liability from the mid-point of the range to the low end of the range. This would result in inconsistent financial statements over time, in that recognized income would increase without any corresponding improvement in the underlying quality of the entity's earnings. In this example, the auditor measures the misstatement as the difference between the accounting estimate made by management, and what it would have been if management had used the same relative location in the reasonable range used in the prior period.
75. What constitutes a "good reason" for changing the location from one period to another is a matter of judgment. If there has been a change in management the new management may, quite legitimately, evaluate business risks differently, resulting in a move of the estimate within the range. When management contends that a change in circumstances provides a "good reason" for a change in location, the auditor considers the adequacy of the support for this contention. Even if the audit evidence tends to support management's explanation, the auditor, nevertheless, considers whether the change is an indicator of possible management bias. Indicators of possible management bias are discussed further in paragraphs 77 to 80.

LIKELY MISSTATEMENTS

76. Likely misstatements are misstatements the auditor considers likely to exist from an extrapolation from audit evidence, for example, the amount obtained by projecting known misstatements identified in an audit sample to the entire population from which the sample was drawn. Audit evidence relating to accounting estimates may give rise to likely misstatements when the auditor finds sampling errors when testing the data underlying an accounting estimate.

Indicators of Possible Management Bias

77. **The auditor should consider whether there are indicators of possible management bias in the making of accounting estimates.**
78. When performing the risk assessment and other audit procedures described in this ISA, the auditor is alert for indicators of possible management bias, that is, lack of neutrality in the

making of accounting estimates. For example, management may be motivated to choose an accounting estimate or assumptions that, tend to increase (or avoid decreasing) the carrying amount of assets and accounting estimates that tend to understate liabilities, as a means of managing earnings. With respect to a reasonable range of outcomes where each outcome in the range is equally likely to occur, some accounting frameworks consider the mid-point of the range to be neutral and therefore free from bias.

79. The following provide examples of indicators of possible management bias:

- (a) An entity has made a provision for bad debts of \$100,000. The auditor has determined a reasonable range of outcomes as being from \$100,000 to \$120,000 and has not been able to obtain any audit evidence to indicate that any one outcome in the range is more likely than any other. It follows that:
 - (i) The provision for bad debts, when considered in isolation, is not misstated because it falls within the reasonable range of outcomes; and
 - (ii) If the mid point of the range is used as a reference point, against which to measure neutrality, then there is an indicator of possible management bias of \$10,000 (\$110,000 - \$100,000). The auditor may be concerned that the apparent lack of neutrality may contribute, along with other qualitative aspects of the entity's accounting practices, to a cumulative risk that the financial statements as a whole may be misstated. Qualitative aspects of an entity's accounting practices are described further in ISA 320.
- (b) As described in paragraph 75, even if the audit evidence tends to support management's explanation for changing the location of an estimate from one period to another the auditor, nevertheless, considers whether the change is an indicator of possible management bias.

As required by paragraph 86, the auditor documents indicators of possible management bias arising from accounting estimates, as these may be matters warranting attention by those charged with governance. (ISA 260 "Communication with those charged with governance" requires the auditor to consider matters of governance interest that arise from the audit of the financial statements and communicate them with those charged with governance.)

80. This ISA provides standards and guidance relating to the auditor's consideration and documentation of indicators of possible management bias with respect to accounting estimates. This ISA does not, however, provide guidance relating to the auditor's evaluation of the audit evidence of possible management bias. [Proposed revised] ISA 320 provides the auditor with guidance on evaluating possible management bias identified during the audit.

Evaluating the Disclosure of Estimation Uncertainty in the Financial Statements

81. **Where an accounting estimate falls within a reasonable range of outcomes that is greater than materiality, the auditor should determine whether the applicable financial reporting framework requires disclosure of the estimation uncertainty, and if so, evaluate the adequacy of such disclosure.**

82. Some financial reporting frameworks prescribe the disclosure of key assumptions about the future 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 are described using terms such as:
- Key sources of estimation uncertainty.
 - Critical Accounting Estimates.
83. Where the applicable financial reporting framework does not prescribe disclosure of estimation uncertainty, the auditor nevertheless encourages management to describe, in the notes to the financial statements, the circumstances giving rise to a reasonable range that is wider than materiality. ISA 701 “Modifications to the 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.

Management Representations

84. **The auditor should obtain written representations from management regarding the reasonableness of significant assumptions used by them in making accounting estimates.**
85. 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.
 - The completeness and appropriateness of disclosures related to accounting estimates under the entity’s financial reporting framework.
 - Whether subsequent events require adjustment to the accounting estimates and disclosures included in the financial statements.

Documentation

86. **The auditor should document:**
- (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 risks;**
 - (c) **The results of substantive procedures to respond to significant risks;**
 - (d) **Misstatements identified by the auditors; and**
 - (e) **Indicators of possible management bias.**

Effective Date

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

Public Sector Perspective

The need for, and if so the content of, this section to be considered by the Public Sector Committee

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