Standard

Audit and Assurance

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Auditing Accounting Estimates and Related Disclosures

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INTERNATIONAL STANDARD ON AUDITING (UK) 540 (REVISED DECEMBER 2018)

AUDITING ACCOUNTING ESTIMATES AND RELATED DISCLOSURES

(Effective for audits of financial statements for periods beginning on or after 15 December 2019)

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International Standard on Auditing (UK) (ISA (UK)) 540 (Revised December 2018), *Auditing Accounting Estimates and Related Disclosures*, should be read in conjunction with ISA (UK) 200 (Revised June 2016), *Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing (UK)*.

Introduction

Scope of this ISA (UK)

1. This International Standard on Auditing (UK) (ISA (UK)) deals with the auditor's responsibilities relating to accounting estimates and related disclosures in an audit of financial statements. Specifically, it includes requirements and guidance that refer to, or expand on, how ISA (UK) 315 (Revised July 2020),[1] ISA (UK) 330 (Revised July 2017),[2] ISA (UK) 450 (Revised June 2016),[3] ISA (UK) 500[4] and other relevant ISAs (UK) are to be applied in relation to accounting estimates and related disclosures. It also includes requirements and guidance on the evaluation of misstatements of accounting estimates and related disclosures, and indicators of possible management bias.

Nature of Accounting Estimates

2. Accounting estimates vary widely in nature and are required to be made by management when the monetary amounts cannot be directly observed. The measurement of these monetary amounts is subject to estimation uncertainty, which reflects inherent limitations in knowledge or data. These limitations give rise to inherent subjectivity and variation in the measurement outcomes. The process of making accounting estimates involves selecting and applying a method using assumptions and data, which requires judgment by management and can give rise to complexity in measurement. The effects of complexity, subjectivity or other inherent risk factors on the measurement of these monetary amounts affects their susceptibility to misstatement. (Ref: Para. A1–A6, Appendix 1)

3. Although this ISA (UK) applies to all accounting estimates, the degree to which an accounting estimate is subject to estimation uncertainty will vary substantially. The nature, timing and extent of the risk assessment and further audit procedures required by this ISA (UK) will vary in relation to the estimation uncertainty and the assessment of the related risks of material misstatement. For certain accounting estimates, estimation uncertainty may be very low, based on their nature, and the complexity and subjectivity involved in making them may also be very low. For such accounting estimates, the risk assessment procedures and further audit procedures required by this ISA (UK) would not be expected to be extensive. When estimation uncertainty, complexity or subjectivity are very high, such procedures would be expected to be much more extensive. This ISA (UK) contains guidance on how the requirements of this ISA (UK) can be scaled. (Ref: Para. A7)

Key Concepts of This ISA (UK)

4. ISA (UK) 315 (Revised July 2020) requires a separate assessment of inherent risk for identified risks of material misstatement at the assertion level.[5] In the context of ISA (UK) 540 (Revised December 2018), and depending on the nature of a particular accounting estimate, the susceptibility of an assertion to a misstatement that could be

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1 ISA (UK) 315 (Revised July 2020), *Identifying and Assessing the Risks of Material Misstatement*.

2 ISA (UK) 330 (Revised July 2017), *The Auditor's Responses to Assessed Risks.*

3 ISA (UK) 450 (Revised June 2016), *Evaluation of Misstatements Identified during the Audit.*

4 ISA (UK) 500, *Audit Evidence.*

5 ISA (UK) 315 (Revised July 2020), paragraph 31.

material may be subject to or affected by estimation uncertainty, complexity, subjectivity or other inherent risk factors, and the interrelationship among them. Accordingly, the assessment of inherent risk depends on the degree to which the inherent risk factors affect the likelihood or magnitude of misstatement, and varies on a scale that is referred to as the spectrum of inherent risk. (Ref: Para. A8–A9, A65–A66, Appendix 1)

5. This ISA (UK) refers to relevant requirements in ISA (UK) 315 (Revised July 2020) and ISA (UK) 330 (Revised July 2017), and provides related guidance, to emphasize the importance of the auditor's decisions about controls relating to accounting estimates, including decisions about whether:

   - There are controls required to be identified by ISA (UK) 315 (Revised July 2020), for which the auditor is required to evaluate their design and determine whether they have been implemented.
   - To test the operating effectiveness of controls.

6. ISA (UK) 315 (Revised July 2020) also requires a separate assessment of control risk when assessing the risks of material misstatement at the assertion level. In assessing control risk, the auditor takes into account whether the auditor's further audit procedures contemplate planned reliance on the operating effectiveness of controls. If the auditor does not plan to test the operating effectiveness of controls, or does not intend to rely on the operating effectiveness of controls, the auditor's assessment of control risk is such that the assessment of the risk of material misstatement is the same as the assessment of inherent risk. (Ref: Para. A10)

7. This ISA (UK) emphasizes that the auditor's further audit procedures (including, where appropriate, tests of controls) need to be responsive to the reasons for the assessed risks of material misstatement at the assertion level, taking into account the effect of one or more inherent risk factors and the auditor's assessment of control risk.

8. The exercise of professional skepticism in relation to accounting estimates is affected by the auditor's consideration of inherent risk factors, and its importance increases when accounting estimates are subject to a greater degree of estimation uncertainty or are affected to a greater degree by complexity, subjectivity or other inherent risk factors. Similarly, the exercise of professional skepticism is important when there is greater susceptibility to misstatement due to management bias or other fraud risk factors insofar as they affect inherent risk. (Ref: Para. A11)

9. This ISA (UK) requires the auditor to evaluate, based on the audit procedures performed and the audit evidence obtained, whether the accounting estimates and related disclosures are reasonable[6] in the context of the applicable financial reporting framework, or are misstated. For purposes of this ISA (UK), reasonable in the context of the applicable financial reporting framework means that the relevant requirements of the applicable financial reporting framework have been applied appropriately, including those that address: (Ref: Para. A12–A13, A139–A144)

   - The making of the accounting estimate, including the selection of the method, assumptions and data in view of the nature of the accounting estimate and the facts and circumstances of the entity;

[6] See also ISA (UK) 700 (Revised November 2019), *Forming an Opinion and Reporting on Financial Statements*, paragraph 13(c).

- The selection of management's point estimate; and
- The disclosures about the accounting estimate, including disclosures about how the accounting estimate was developed and that explain the nature, extent, and sources of estimation uncertainty.

Effective Date

10. This ISA (UK) is effective for audits of financial statements for periods beginning on or after 15 December 2019.

Objective

11. The objective of the auditor is to obtain sufficient appropriate audit evidence about whether accounting estimates and related disclosures in the financial statements are reasonable in the context of the applicable financial reporting framework.

Definitions

12. For purposes of the ISAs (UK), the following terms have the meanings attributed below:

    (a) Accounting estimate – A monetary amount for which the measurement, in accordance with the requirements of the applicable financial reporting framework, is subject to estimation uncertainty. (Ref: Para. A14)

    (b) Auditor's point estimate or auditor's range – An amount, or range of amounts, respectively, developed by the auditor in evaluating management's point estimate. (Ref: Para. A15)

    (c) Estimation uncertainty – Susceptibility to an inherent lack of precision in measurement. (Ref: Para. A16, Appendix 1)

    (d) Management bias – A lack of neutrality by management in the preparation of information. (Ref: Para. A17)

    (e) Management's point estimate – The amount selected by management for recognition or disclosure in the financial statements as an accounting estimate.

    (f) Outcome of an accounting estimate – The actual monetary amount that results from the resolution of the transaction(s), event(s) or condition(s) addressed by an accounting estimate. (Ref: Para. A18)

Requirements

Risk Assessment Procedures and Related Activities

13. When obtaining an understanding of the entity and its environment, the applicable financial reporting framework and the entity's system of internal control, as required by ISA (UK) 315 (Revised July 2020),[7] the auditor shall obtain an understanding of the following matters related to the entity's accounting estimates. The auditor's procedures to obtain the understanding shall be performed to the extent necessary to obtain audit evidence that provides an appropriate basis for the identification and assessment of risks of material misstatement at the financial statement and assertion levels. (Ref: Para. A19–A22)

[7] ISA (UK) 315 (Revised July 2020), paragraphs 19–27.

Obtaining an Understanding of the Entity and Its Environment and the Applicable Financial Reporting Framework

(a) The entity's transactions and other events or conditions that may give rise to the need for, or changes in, accounting estimates to be recognized or disclosed in the financial statements. (Ref: Para. A23)

(b) The requirements of the applicable financial reporting framework related to accounting estimates (including the recognition criteria, measurement bases, and the related presentation and disclosure requirements); and how they apply in the context of the nature and circumstances of the entity and its environment, including how the inherent risk factors affect susceptibility to misstatement of assertions. (Ref: Para. A24–A25)

(c) Regulatory factors relevant to the entity's accounting estimates, including, when applicable, regulatory frameworks related to prudential supervision. (Ref: Para. A26)

(d) The nature of the accounting estimates and related disclosures that the auditor expects to be included in the entity's financial statements, based on the auditor's understanding of the matters in 13(a)–(c) above. (Ref: Para. A27)

Obtaining an Understanding of the Entity's System of Internal Control

(e) The nature and extent of oversight and governance that the entity has in place over management's financial reporting process relevant to accounting estimates. (Ref: Para. A28–A30).

(f) How management identifies the need for, and applies, specialized skills or knowledge related to accounting estimates, including with respect to the use of a management's expert. (Ref: Para. A31)

(g) How the entity's risk assessment process identifies and addresses risks relating to accounting estimates. (Ref: Para. A32–A33)

(h) The entity's information system as it relates to accounting estimates, including:

  (i) How information relating to accounting estimates and related disclosures for significant classes of transactions, account balances or disclosures flows through the entity’s information system; and (Ref: Para. A34–A35)

  (ii) For such accounting estimates and related disclosures, how management:

    a. Identifies the relevant methods, assumptions or sources of data, and the need for changes in them, that are appropriate in the context of the applicable financial reporting framework, including how management: (Ref: Para. A36–A37-1)

      i. Selects or designs, and applies, the methods used, including the use of models; (Ref: Para. A38–A39)

      ii. Selects the assumptions to be used, including consideration of alternatives, and identifies significant assumptions; and (Ref: Para. A40–A43)

      iii. Selects the data to be used; (Ref: Para. A44)

b. Understands the degree of estimation uncertainty, including through considering the range of possible measurement outcomes; and (Ref: Para. A45)

c. Addresses the estimation uncertainty, including selecting a point estimate and related disclosures for inclusion in the financial statements. (Ref: Para.A46–A49)

(i) Identified controls in the control activities component[8] over management's process for making accounting estimates as described in paragraph 13(h)(ii). (Ref: Para. A50–A54)

(j) How management reviews the outcome(s) of previous accounting estimates and responds to the results of that review.

14. The auditor shall review the outcome of previous accounting estimates, or, where applicable, their subsequent re-estimation to assist in identifying and assessing the risks of material misstatement in the current period. The auditor shall take into account the characteristics of the accounting estimates in determining the nature and extent of that review. The review is not intended to call into question judgments about previous period accounting estimates that were appropriate based on the information available at the time they were made. (Ref: Para. A55–A60)

15. With respect to accounting estimates, the auditor shall determine whether the engagement team requires specialized skills or knowledge to perform the risk assessment procedures, to identify and assess the risks of material misstatement, to design and perform audit procedures to respond to those risks, or to evaluate the audit evidence obtained. (Ref: Para. A61–A63)

Identifying and Assessing the Risks of Material Misstatement

16. In identifying and assessing the risks of material misstatement relating to an accounting estimate and related disclosures at the assertion level, including separately assessing inherent risk and control risk at the assertion level, as required by ISA (UK) 315 (Revised July 2020),[9] the auditor shall take the following into account in identifying the risks of material misstatement and in assessing inherent risk: (Ref: Para. A64–A71)

(a) The degree to which the accounting estimate is subject to estimation uncertainty; and (Ref: Para. A72–A75)

(b) The degree to which the following are affected by complexity, subjectivity, or other inherent risk factors: (Ref: Para. A76–A79)

(i) The selection and application of the method, assumptions and data in making the accounting estimate; or

(ii) The selection of management's point estimate and related disclosures for inclusion in the financial statements.

17. The auditor shall determine whether any of the risks of material misstatement identified and assessed in accordance with paragraph 16 are, in the auditor's judgment, a significant risk.[10] If the auditor has determined that a significant risk exists, the auditor

8 ISA (UK) 315 (Revised July 2020), paragraphs 26(a)(i)–(iv).

9 ISA (UK) 315 (Revised July 2020), paragraphs 31 and 34.

10 ISA (UK) 315 (Revised July 2020), paragraph 32.

shall identify controls that address that risk,[11] and evaluate whether such controls have been designed effectively, and determine whether they have been implemented.[12] (Ref: Para. A80)

Responses to the Assessed Risks of Material Misstatement

18. As required by ISA (UK) 330 (Revised July 2017),[13] the auditor's further audit procedures shall be responsive to the assessed risks of material misstatement at the assertion level,[14] considering the reasons for the assessment given to those risks. The auditor's further audit procedures shall include one or more of the following approaches:

    (a) Obtaining audit evidence from events occurring up to the date of the auditor's report (see paragraph 21);

    (b) Testing how management made the accounting estimate (see paragraphs 22–27); or

    (c) Developing an auditor's point estimate or range (see paragraphs 28–29).

    The auditor's further audit procedures shall take into account that the higher the assessed risk of material misstatement, the more persuasive the audit evidence needs to be.[15] The auditor shall design and perform further audit procedures in a manner that is not biased towards obtaining audit evidence that may be corroborative or towards excluding audit evidence that may be contradictory. (Ref: Para. A81–A84)

19. As required by ISA (UK) 330 (Revised July 2017),[16] the auditor shall design and perform tests to obtain sufficient appropriate audit evidence as to the operating effectiveness of controls, if:

    (a) The auditor's assessment of risks of material misstatement at the assertion level includes an expectation that the controls are operating effectively, or

    (b) Substantive procedures alone cannot provide sufficient appropriate audit evidence at the assertion level.

    In relation to accounting estimates, the auditor's tests of such controls shall be responsive to the reasons for the assessment given to the risks of material misstatement. In designing and performing tests of controls, the auditor shall obtain more persuasive audit evidence the greater the reliance the auditor places on the effectiveness of a control.[17] (Ref: Para. A85–A89)

20. For a significant risk relating to an accounting estimate, the auditor's further audit procedures shall include tests of controls in the current period if the auditor plans to rely on those controls. When the approach to a significant risk consists only of

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11 ISA (UK) 315 (Revised July 2020), paragraph 26(a)(i).

12 ISA (UK) 315 (Revised July 2020), paragraph 26(a).

13 ISA (UK) 330 (Revised July 2017), paragraphs 6–15 and 18.

14 ISA (UK) 330 (Revised July 2017), paragraphs 6–7 and 21.

15 ISA (UK) 330 (Revised July 2017), paragraph 7(b).

16 ISA (UK) 330 (Revised July 2017), paragraph 8.

17 ISA (UK) 330 (Revised July 2017), paragraph 9.

substantive procedures, those procedures shall include tests of details.[18] (Ref: Para. A90)

Obtaining Audit Evidence from Events Occurring up to the Date of the Auditor's Report

21. When the auditor's further audit procedures include obtaining audit evidence from events occurring up to the date of the auditor's report, the auditor shall evaluate whether such audit evidence is sufficient and appropriate to address the risks of material misstatement relating to the accounting estimate, taking into account that changes in circumstances and other relevant conditions between the event and the measurement date may affect the relevance of such audit evidence in the context of the applicable financial reporting framework. (Ref: Para. A91–A93)

Testing How Management Made the Accounting Estimate

22. When testing how management made the accounting estimate, the auditor's further audit procedures shall include procedures, designed and performed in accordance with paragraphs 23–26, to obtain sufficient appropriate audit evidence regarding the risks of material misstatement relating to: (Ref: Para. A94)

    (a) The selection and application of the methods, significant assumptions and the data used by management in making the accounting estimate; and

    (b) How management selected the point estimate and developed related disclosures about estimation uncertainty.

Methods

23. In applying the requirements of paragraph 22, with respect to methods, the auditor's further audit procedures shall address:

    (a) Whether the method selected is appropriate in the context of the applicable financial reporting framework, and, if applicable, changes from the method used in prior periods are appropriate; (Ref: Para. A95, A97)

    (b) Whether judgments made in selecting the method give rise to indicators of possible management bias; (Ref: Para. A96)

    (c) Whether the calculations are applied in accordance with the method and are mathematically accurate;

    (d) When management's application of the method involves complex modelling, whether judgments have been applied consistently and whether, when applicable: (Ref: Para. A98–A100)

        (i) The design of the model meets the measurement objective of the applicable financial reporting framework, is appropriate in the circumstances, and, if applicable, changes from the prior period's model are appropriate in the circumstances; and

        (ii) Adjustments to the output of the model are consistent with the measurement objective of the applicable financial reporting framework and are appropriate in the circumstances; and

    (e) Whether the integrity of the significant assumptions and the data has been maintained in applying the method. (Ref: Para. A101)

[18] ISA (UK) 330 (Revised July 2017), paragraphs 15 and 21.

Significant Assumptions

24. In applying the requirements of paragraph 22, with respect to significant assumptions, the auditor's further audit procedures shall address:

    (a) Whether the significant assumptions are appropriate in the context of the applicable financial reporting framework, and, if applicable, changes from prior periods are appropriate; (Ref: Para. A95, A102–A103)

    (b) Whether judgments made in selecting the significant assumptions give rise to indicators of possible management bias; (Ref: Para. A96)

    (c) Whether the significant assumptions are consistent with each other and with those used in other accounting estimates, or with related assumptions used in other areas of the entity's business activities, based on the auditor's knowledge obtained in the audit; and (Ref: Para. A104)

    (d) When applicable, whether management has the intent to carry out specific courses of action and has the ability to do so. (Ref: Para. A105)

Data

25. In applying the requirements of paragraph 22, with respect to data, the auditor's further audit procedures shall address:

    (a) Whether the data is appropriate in the context of the applicable financial reporting framework, and, if applicable, changes from prior periods are appropriate (Ref: Para. A95, A106);

    (b) Whether judgments made in selecting the data give rise to indicators of possible management bias; (Ref: Para. A96)

    (c) Whether the data is relevant and reliable in the circumstances; and (Ref: Para. A107)

    (d) Whether the data has been appropriately understood or interpreted by management, including with respect to contractual terms. (Ref: Para. A108)

Management's Selection of a Point Estimate and Related Disclosures about Estimation Uncertainty

26. In applying the requirements of paragraph 22, the auditor's further audit procedures shall address whether, in the context of the applicable financial reporting framework, management has taken appropriate steps to:

    (a) Understand estimation uncertainty; and (Ref: Para. A109)

    (b) Address estimation uncertainty by selecting an appropriate point estimate and by developing related disclosures about estimation uncertainty. (Ref: Para. A110–A114)

27. When, in the auditor's judgment based on the audit evidence obtained, management has not taken appropriate steps to understand or address estimation uncertainty, the auditor shall: (Ref: Para. A115–A117)

    (a) Request management to perform additional procedures to understand estimation uncertainty or to address it by reconsidering the selection of management's point estimate or considering providing additional disclosures relating to the estimation uncertainty, and evaluate management's response(s) in accordance with

paragraph 26;

(b) If the auditor determines that management's response to the auditor's request does not sufficiently address estimation uncertainty, to the extent practicable, develop an auditor's point estimate or range in accordance with paragraphs 28–29; and

(c) Evaluate whether a deficiency in internal control exists and, if so, communicate in accordance with ISA (UK) 265.[19]

Developing an Auditor's Point Estimate or Range

28. When the auditor develops a point estimate or range to evaluate management's point estimate and related disclosures about estimation uncertainty, including when required by paragraph 27(b), the auditor's further audit procedures shall include procedures to evaluate whether the methods, assumptions or data used are appropriate in the context of the applicable financial reporting framework. Regardless of whether the auditor uses management's or the auditor's own methods, assumptions or data, these further audit procedures shall be designed and performed to address the matters in paragraphs 23–25. (Ref: Para. A118–A123)

29. If the auditor develops an auditor's range, the auditor shall:

(a) Determine that the range includes only amounts that are supported by sufficient appropriate audit evidence and have been evaluated by the auditor to be reasonable in the context of the measurement objectives and other requirements of the applicable financial reporting framework; and (Ref: Para. A124–A125)

(b) Design and perform further audit procedures to obtain sufficient appropriate audit evidence regarding the assessed risks of material misstatement relating to the disclosures in the financial statements that describe the estimation uncertainty.

Other Considerations Relating to Audit Evidence

30. In obtaining audit evidence regarding the risks of material misstatement relating to accounting estimates, irrespective of the sources of information to be used as audit evidence, the auditor shall comply with the relevant requirements in ISA (UK) 500.

When using the work of a management's expert, the requirements in paragraphs 21–29 of this ISA (UK) may assist the auditor in evaluating the appropriateness of the expert's work as audit evidence for a relevant assertion in accordance with paragraph 8(c) of ISA (UK) 500. In evaluating the work of the management's expert, the nature, timing and extent of the further audit procedures are affected by the auditor's evaluation of the expert's competence, capabilities and objectivity, the auditor's understanding of the nature of the work performed by the expert, and the auditor's familiarity with the expert's field of expertise. (Ref: Para. A126–A132)

Disclosures Related to Accounting Estimates

31. The auditor shall design and perform further audit procedures to obtain sufficient appropriate audit evidence regarding the assessed risks of material misstatement at the assertion level for disclosures related to an accounting estimate, other than those related to estimation uncertainty addressed in paragraphs 26(b) and 29(b).

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[19] ISA (UK) 265, *Communicating Deficiencies in Internal Control to Those Charged with Governance and Management.*

Indicators of Possible Management Bias

32. The auditor shall evaluate whether judgments and decisions made by management in making the accounting estimates included in the financial statements, even if they are individually reasonable, are indicators of possible management bias. When indicators of possible management bias are identified, the auditor shall evaluate the implications for the audit. Where there is intention to mislead, management bias is fraudulent in nature. (Ref: Para. A133–A136)

32-1. In accordance with ISA (UK) 200 (Revised June 2016),[19a] the auditor shall maintain professional skepticism throughout the audit and in particular when reviewing management estimates relating to fair values, the impairment of assets and provisions).

Overall Evaluation Based on Audit Procedures Performed

33. In applying ISA (UK) 330 (Revised July 2017) to accounting estimates,[20] the auditor shall evaluate, based on the audit procedures performed and audit evidence obtained, whether: (Ref: Para. A137–A138)

    (a) The assessments of the risks of material misstatement at the assertion level remain appropriate, including when indicators of possible management bias have been identified;

    (b) Management's decisions relating to the recognition, measurement, presentation and disclosure of these accounting estimates in the financial statements are in accordance with the applicable financial reporting framework; and

    (c) Sufficient appropriate audit evidence has been obtained.

34. In making the evaluation required by paragraph 33(c), the auditor shall take into account all relevant audit evidence obtained, whether corroborative or contradictory.[21] If the auditor is unable to obtain sufficient appropriate audit evidence, the auditor shall evaluate the implications for the audit or the auditor's opinion on the financial statements in accordance with ISA (UK) 705 (Revised June 2016).[22]

Determining Whether the Accounting Estimates are Reasonable or Misstated

35. The auditor shall determine whether the accounting estimates and related disclosures are reasonable in the context of the applicable financial reporting framework, or are misstated. ISA (UK) 450 (Revised June 2016)[23] provides guidance on how the auditor may distinguish misstatements (whether factual, judgmental, or projected) for the auditor's evaluation of the effect of uncorrected misstatements on the financial statements. (Ref: Para. A12–A13, A139–A144)

36. In relation to accounting estimates, the auditor shall evaluate:

    (a) In the case of a fair presentation framework, whether management has included disclosures, beyond those specifically required by the framework, that are necessary to achieve the fair presentation of the financial statements as a

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[19a] ISA (UK) 200 (Revised June 2016), paragraph 15.

[20] ISA (UK) 330 (Revised July 2017), paragraphs 25–26.

[21] ISA (UK) 500, paragraph 11.

[22] ISA (UK) 705 (Revised June 2016), *Modifications to the Opinion in the Independent Auditor's Report.*

[23] ISA (UK) 450 (Revised June 2016), paragraph A6.

whole;[24] or

(b) In the case of a compliance framework, whether the disclosures are those that are necessary for the financial statements not to be misleading.[25]

Written Representations

37. The auditor shall request written representations from management[26] and, when appropriate, those charged with governance about whether the methods, significant assumptions and the data used in making the accounting estimates and the related disclosures are appropriate to achieve recognition, measurement or disclosure that is in accordance with the applicable financial reporting framework. The auditor shall also consider the need to obtain representations about specific accounting estimates, including in relation to the methods, assumptions, or data used. (Ref: Para. A145)

Communication with Those Charged With Governance, Management, or Other Relevant Parties

38. In applying ISA (UK) 260 (Revised November 2019)[27] and ISA (UK) 265,[28] the auditor is required to communicate with those charged with governance or management about certain matters, including significant qualitative aspects of the entity's accounting practices and significant deficiencies in internal control, respectively. In doing so, the auditor shall consider the matters, if any, to communicate regarding accounting estimates and take into account whether the reasons given to the risks of material misstatement relate to estimation uncertainty, or the effects of complexity, subjectivity or other inherent risk factors in making accounting estimates and related disclosures. In addition, in certain circumstances, the auditor is required by law or regulation to communicate about certain matters with other relevant parties, such as regulators or prudential supervisors. (Ref: Para. A146–A148)

Documentation

39. The auditor shall include in the audit documentation:[29] (Ref: Para. A149–A152)

(a) Key elements of the auditor's understanding of the entity and its environment, including the entity's internal control related to the entity's accounting estimates;

(b) The linkage of the auditor's further audit procedures with the assessed risks of material misstatement at the assertion level,[30] taking into account the reasons (whether related to inherent risk or control risk) given to the assessment of those risks;

(c) The auditor's response(s) when management has not taken appropriate steps to understand and address estimation uncertainty;

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24 See also ISA (UK) 700 (Revised November 2019), *Forming an Opinion and Reporting on Financial Statements*, paragraph 14.

25 See also ISA (UK) 700 (Revised November 2019), *Forming an Opinion and Reporting on Financial Statements*, paragraph 19.

26 ISA (UK) 580, *Written Representations.*

27 ISA (UK) 260 (Revised November 2019), *Communication with Those Charged with Governance*, paragraph 16(a).

28 ISA (UK) 265, paragraph 9.

29 ISA (UK) 230 (Revised June 2016), *Audit Documentation*, paragraphs 8–11, A6, A7 and A10.

30 ISA (UK) 330 (Revised July 2017), paragraph 28(b).

(d) Indicators of possible management bias related to accounting estimates, if any, and the auditor's evaluation of the implications for the audit, as required by paragraph 32; and

(e) Significant judgments relating to the auditor's determination of whether the accounting estimates and related disclosures are reasonable in the context of the applicable financial reporting framework, or are misstated.

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Application and Other Explanatory Material

Nature of Accounting Estimates (Ref: Para. 2)

Examples of Accounting Estimates

A1. Examples of accounting estimates related to classes of transactions, account balances and disclosures include:

- Inventory obsolescence.
- Depreciation of property and equipment.
- Valuation of infrastructure assets.
- Valuation of financial instruments.
- Outcome of pending litigation.
- Provision for expected credit losses.
- Valuation of insurance contract liabilities.
- Warranty obligations.
- Employee retirement benefits liabilities.
- Share-based payments.
- Fair value of assets or liabilities acquired in a business combination, including the determination of goodwill and intangible assets.
- Impairment of long-lived assets or property or equipment held for disposal.
- Non-monetary exchanges of assets or liabilities between independent parties.
- Revenue recognized for long-term contracts.

Methods

A2. A method is a measurement technique used by management to make an accounting estimate in accordance with the required measurement basis. For example, one recognized method used to make accounting estimates relating to share-based payment transactions is to determine a theoretical option call price using the Black Scholes option pricing formula. A method is applied using a computational tool or process, sometimes referred to as a model, and involves applying assumptions and data and taking into account a set of relationships between them.

Assumptions and Data

A3. Assumptions involve judgments based on available information about matters such as the choice of an interest rate, a discount rate, or judgments about future conditions or events. An assumption may be selected by management from a range of appropriate

alternatives. Assumptions that may be made or identified by a management's expert become management's assumptions when used by management in making an accounting estimate.

A4. For purposes of this ISA (UK), data is information that can be obtained through direct observation or from a party external to the entity. Information obtained by applying analytical or interpretive techniques to data is referred to as derived data when such techniques have a well-established theoretical basis and therefore less need for management judgment. Otherwise, such information is an assumption.

A5. Examples of data include:

- Prices agreed in market transactions;
- Operating times or quantities of output from a production machine;
- Historical prices or other terms included in contracts, such as a contracted interest rate, a payment schedule, and term included in a loan agreement;
- Forward-looking information such as economic or earnings forecasts obtained from an external information source, or
- A future interest rate determined using interpolation techniques from forward interest rates (derived data).

A6. Data can come from a wide range of sources. For example, data can be:

- Generated within the organization or externally;
- Obtained from a system that is either within or outside the general or subsidiary ledgers;
- Observable in contracts; or
- Observable in legislative or regulatory pronouncements.

Scalability (Ref: Para. 3)

A7. Examples of paragraphs that include guidance on how the requirements of this ISA (UK) can be scaled include paragraphs A20–A22, A63, A67 and A84.

Key Concepts of This ISA (UK)

Inherent Risk Factors (Ref: Para. 4)

A8. Inherent risk factors are characteristics of events or conditions that affect susceptibility to misstatement, whether due to fraud or error, of an assertion about a class of transactions, account balance or disclosures, before consideration of controls.[31] Appendix 1 further explains the nature of these inherent risk factors, and their inter-relationships, in the context of making accounting estimates and their presentation in the financial statements.

A9. When assessing the risks of material misstatement at the assertion level,[32] in addition to estimation uncertainty, complexity, and subjectivity, the auditor also takes into account the degree to which inherent risk factors included in ISA (UK) 315 (Revised July 2020) (other than estimation uncertainty, complexity, and subjectivity) affect

[31] ISA (UK) 315 (Revised July 2020), paragraph 12(f).

[32] ISA (UK) 315 (Revised July 2020), paragraph 31.

susceptibility of assertions to misstatement about the accounting estimate. Such additional inherent risk factors include:

- Change in the nature or circumstances of the relevant financial statement items, or requirements of the applicable financial reporting framework which may give rise to the need for changes in the method, assumptions or data used to make the accounting estimate.
- Susceptibility to misstatement due to management bias or other fraud risk factors insofar as they affect inherent risk, in making the accounting estimate.
- Uncertainty, other than estimation uncertainty.

Control Risk (Ref: Para. 6)

A10. In assessing control risk at the assertion level in accordance with ISA (UK) 315 (Revised July 2020), the auditor takes into account whether the auditor plans to test the operating effectiveness of controls. When the auditor is considering whether to test the operating effectiveness of controls, the auditor's evaluation that controls are effectively designed and have been implemented supports an expectation, by the auditor, about the operating effectiveness of the controls in establishing the plan to test them.

Professional Skepticism (Ref: Para. 8)

A11. Paragraphs A60, A95, A96, A137 and A139 are examples of paragraphs that describe ways in which the auditor can exercise professional skepticism. Paragraph A152 provides guidance on ways in which the auditor's exercise of professional skepticism may be documented, and includes examples of specific paragraphs in this ISA (UK) for which documentation may provide evidence of the exercise of professional skepticism.

Concept of "Reasonable" (Ref: Para. 9, 35)

A12. Other considerations that may be relevant to the auditor's consideration of whether the accounting estimates and related disclosures are reasonable in the context of the applicable financial reporting framework include whether:

- The data and assumptions used in making the accounting estimate are consistent with each other and with those used in other accounting estimates or areas of the entity's business activities; and
- The accounting estimate takes into account appropriate information as required by the applicable financial reporting framework.

A13. The term "applied appropriately" as used in paragraph 9 means in a manner that not only complies with the requirements of the applicable financial reporting framework but, in doing so, reflects judgments that are consistent with the objective of the measurement basis in that framework.

Definitions

Accounting Estimate (Ref: Para. 12(a))

A14. Accounting estimates are monetary amounts that may be related to classes of transactions or account balances recognized or disclosed in the financial statements. Accounting estimates also include monetary amounts included in disclosures or used

to make judgments about recognition or disclosure relating to a class of transactions or account balance.

Auditor's Point Estimate or Auditor's Range (Ref: Para. 12(b))

A15. An auditor's point estimate or range may be used to evaluate an accounting estimate directly (for example, an impairment provision or the fair value of different types of financial instruments), or indirectly (for example, an amount to be used as a significant assumption for an accounting estimate). A similar approach may be taken by the auditor in developing an amount or range of amounts in evaluating a non-monetary item of data or an assumption (for example, an estimated useful life of an asset).

Estimation Uncertainty (Ref: Para. 12(c))

A16. Not all accounting estimates are subject to a high degree of estimation uncertainty. For example, some financial statement items may have an active and open market that provides readily available and reliable information on the prices at which actual exchanges occur. However, estimation uncertainty may exist even when the valuation method and data are well defined. For example, valuation of securities quoted on an active and open market at the listed market price may require adjustment if the holding is significant or is subject to restrictions in marketability. In addition, general economic circumstances prevailing at the time, for example, illiquidity in a particular market, may impact estimation uncertainty.

Management Bias (Ref: Para. 12(d))

A17. Financial reporting frameworks often call for neutrality, that is, freedom from bias. Estimation uncertainty gives rise to subjectivity in making an accounting estimate. The presence of subjectivity gives rise to the need for judgment by management and the susceptibility to unintentional or intentional management bias (for example, as a result of motivation to achieve a desired profit target or capital ratio). The susceptibility of an accounting estimate to management bias increases with the extent to which there is subjectivity in making the accounting estimate.

Outcome of an Accounting Estimate (Ref: Para. 12(f))

A18. Some accounting estimates, by their nature, do not have an outcome that is relevant for the auditor's work performed in accordance with this ISA (UK). For example, an accounting estimate may be based on perceptions of market participants at a point in time. Accordingly, the price realized when an asset is sold or a liability is transferred may differ from the related accounting estimate made at the reporting date because, with the passage of time, the market participants' perceptions of value have changed.

Risk Assessment Procedures and Related Activities

Obtaining an Understanding of the Entity and Its Environment, the Applicable Financial Reporting Framework, and the Entity's System of Internal Control (Ref: Para. 13)

A19. Paragraphs 19–27 of ISA (UK) 315 (Revised July 2020) require the auditor to obtain an understanding of certain matters about the entity and its environment, the applicable financial reporting framework and the entity's system of internal control. The requirements in paragraph 13 of this ISA (UK) relate more specifically to accounting estimates and build on the broader requirements in ISA (UK) 315 (Revised July 2020).

Scalability

A20. The nature, timing, and extent of the auditor's procedures to obtain the understanding of the entity and its environment, the applicable financial reporting framework, and the entity's system of internal control, related to the entity's accounting estimates, may depend, to a greater or lesser degree, on the extent to which the individual matter(s) apply in the circumstances. For example, the entity may have few transactions or other events or conditions that give rise to the need for accounting estimates, the applicable financial reporting requirements may be simple to apply, and there may be no relevant regulatory factors. Further, the accounting estimates may not require significant judgments, and the process for making the accounting estimates may be less complex. In these circumstances, the accounting estimates may be subject to, or affected by, estimation uncertainty, complexity, subjectivity, or other inherent risk factors to a lesser degree and there may be fewer identified controls in the control activities component. If so, the auditor's risk identification and assessment procedures are likely to be less extensive and may be obtained primarily through inquiries of management with appropriate responsibilities for the financial statements, such as simple walk-throughs of management's process for making the accounting estimate (including when evaluating whether identified controls in that process are designed effectively and when determining whether the control has been implemented).

A21. By contrast, the accounting estimates may require significant judgments by management, and the process for making the accounting estimates may be complex and involve the use of complex models. In addition, the entity may have a more sophisticated information system, and more extensive controls over accounting estimates. In these circumstances, the accounting estimates may be subject to or affected by estimation uncertainty, subjectivity, complexity or other inherent risk factors to a greater degree. If so, the nature or timing of the auditor's risk assessment procedures are likely to be different, or be more extensive, than in the circumstances in paragraph A20.

A22. The following considerations may be relevant for entities with only simple businesses, which may include many smaller entities:

- Processes relevant to accounting estimates may be uncomplicated because the business activities are simple or the required estimates may have a lesser degree of estimation uncertainty.
- Accounting estimates may be generated outside of the general and subsidiary ledgers, controls over their development may be limited, and an owner-manager may have significant influence over their determination. The owner-manager's role in making the accounting estimates may need to be taken into account by the auditor both when identifying the risks of material misstatement and when considering the risk of management bias.

The Entity and Its Environment

The entity's transactions and other events or conditions (Ref: Para. 13(a))

A23. Changes in circumstances that may give rise to the need for, or changes in, accounting estimates may include, for example, whether:

- The entity has engaged in new types of transactions;
- Terms of transactions have changed; or

- New events or conditions have occurred.

The requirements of the applicable financial reporting framework (Ref: Para. 13(b))

A24. Obtaining an understanding of the requirements of the applicable financial reporting framework provides the auditor with a basis for discussion with management and, where applicable, those charged with governance about how management has applied the requirements of the applicable financial reporting framework relevant to the accounting estimates, and about the auditor's determination of whether they have been applied appropriately. This understanding also may assist the auditor in communicating with those charged with governance when the auditor considers a significant accounting practice that is acceptable under the applicable financial reporting framework, not to be the most appropriate in the circumstances of the entity.[33]

A25. In obtaining this understanding, the auditor may seek to understand whether:

- The applicable financial reporting framework:
  - Prescribes certain criteria for the recognition, or methods for the measurement of accounting estimates;
  - Specifies certain criteria that permit or require measurement at a fair value, for example, by referring to management's intentions to carry out certain courses of action with respect to an asset or liability; or
  - Specifies required or suggested disclosures, including disclosures concerning judgments, assumptions, or other sources of estimation uncertainty relating to accounting estimates; and
- Changes in the applicable financial reporting framework require changes to the entity's accounting policies relating to accounting estimates.

Regulatory factors (Ref: Para. 13(c))

A26. Obtaining an understanding of regulatory factors, if any, that are relevant to accounting estimates may assist the auditor in identifying applicable regulatory frameworks (for example, regulatory frameworks established by prudential supervisors in the banking or insurance industries) and in determining whether such regulatory framework(s):

- Addresses conditions for the recognition, or methods for the measurement, of accounting estimates, or provides related guidance thereon;
- Specifies, or provides guidance about, disclosures in addition to the requirements of the applicable financial reporting framework;
- Provides an indication of areas for which there may be a potential for management bias to meet regulatory requirements; or
- Contains requirements for regulatory purposes that are not consistent with requirements of the applicable financial reporting framework, which may indicate potential risks of material misstatement. For example, some regulators may seek to influence minimum levels for expected credit loss provisions that exceed those required by the applicable financial reporting framework.

[33] ISA (UK) 260 (Revised November 2019), paragraph 16(a).

The nature of the accounting estimates and related disclosures that the auditor expects to be included in the financial statements (Ref: Para. 13(d))

A27. Obtaining an understanding of the nature of accounting estimates and related disclosures that the auditor expects to be included in the entity's financial statements assists the auditor in understanding the measurement basis of such accounting estimates and the nature and extent of disclosures that may be relevant. Such an understanding provides the auditor with a basis for discussion with management about how management makes the accounting estimates.

The Entity's Internal Control Relevant to the Audit

The nature and extent of oversight and governance (Ref: Para. 13(e))

A28. In applying ISA (UK) 315 (Revised July 2020),[34] the auditor's understanding of the nature and extent of oversight and governance that the entity has in place over management's process for making accounting estimates may be important to the auditor's required evaluation of whether:

- Management, with the oversight of those charged with governance, has created and maintained a culture of honesty and ethical behavior;
- The control environment provide a an appropriate foundation for the other components of the system of internal control considering the nature and size of the entity; and
- Control deficiencies identified in the control environment undermine the other components of the system of internal control.

A29. The auditor may obtain an understanding of whether those charged with governance:

- Have the skills or knowledge to understand the characteristics of a particular method or model to make accounting estimates, or the risks related to the accounting estimate, for example, risks related to the method or information technology used in making the accounting estimates;
- Have the skills and knowledge to understand whether management made the accounting estimates in accordance with the applicable financial reporting framework;
- Are independent from management, have the information required to evaluate on a timely basis how management made the accounting estimates, and the authority to call into question management's actions when those actions appear to be inadequate or inappropriate;
- Oversee management's process for making the accounting estimates, including the use of models; or
- Oversee the monitoring activities undertaken by management. This may include supervision and review procedures designed to detect and correct any deficiencies in the design or operating effectiveness of controls over the accounting estimates.

A30. Obtaining an understanding of the oversight by those charged with governance may be important when there are accounting estimates that:

[34] ISA (UK) 315 (Revised July 2020), paragraph 21(a).

- Require significant judgment by management to address subjectivity;
- Have high estimation uncertainty;
- Are complex to make, for example, because of the extensive use of information technology, large volumes of data or the use of multiple data sources or assumptions with complex-interrelationships;
- Had, or ought to have had, a change in the method, assumptions or data compared to previous periods; or
- Involve significant assumptions.

Management's application of specialized skills or knowledge, including the use of management's experts (Ref: Para. 13(f))

A31. The auditor may consider whether the following circumstances increase the likelihood that management needs to engage an expert:[35]

- The specialized nature of the matter requiring estimation, for example, the accounting estimate may involve measurement of mineral or hydrocarbon reserves in extractive industries or the evaluation of the likely outcome of applying complex contractual terms.
- The complex nature of the models required to apply the relevant requirements of the applicable financial reporting framework, as may be the case in certain measurements, such as level 3 fair values.[36]
- The unusual or infrequent nature of the condition, transaction or event requiring an accounting estimate.

The entity's risk assessment process (Ref: Para. 13(g))

A32. Understanding how the entity's risk assessment process identifies and addresses risks relating to accounting estimates may assist the auditor in considering changes in:

- The requirements of the applicable financial reporting framework related to the accounting estimates;
- The availability or nature of data sources that are relevant to making the accounting estimates or that may affect the reliability of the data used;
- The entity's information systems or IT environment; and
- Key personnel.

A33. Matters that the auditor may consider in obtaining an understanding of how management identified and addresses the susceptibility to misstatement due to management bias or fraud in making accounting estimates, include whether, and if so how, management:

- Pays particular attention to selecting or applying the methods, assumptions and data used in making accounting estimates.

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[35] ISA (UK) 500, paragraph 8.

[36] See, for example, International Financial Reporting Standard (IFRS) 13, *Fair Value Measurement*.

- Monitors key performance indicators that may indicate unexpected or inconsistent performance compared with historical or budgeted performance or with other known factors.
- Identifies financial or other incentives that may be a motivation for bias.
- Monitors the need for changes in the methods, significant assumptions or the data used in making accounting estimates.
- Establishes appropriate oversight and review of models used in making accounting estimates.
- Requires documentation of the rationale for, or an independent review of, significant judgments made in making accounting estimates.

The entity's information system relating to accounting estimates (Ref: Para. 13(h)(i))

A34. The significant classes of transactions, events and conditions within the scope of paragraph 13(h) are the same as the significant classes of transactions, events and conditions relating to accounting estimates and related disclosures that are subject to paragraph 25(a) of ISA (UK) 315 (Revised July 2020). In obtaining the understanding of the entity's information system as it relates to accounting estimates, the auditor may consider:

- Whether the accounting estimates arise from the recording of routine and recurring transactions or whether they arise from non-recurring or unusual transactions.
- How the information system addresses the completeness of accounting estimates and related disclosures, in particular for accounting estimates related to liabilities.

A35. During the audit, the auditor may identify classes of transactions, events or conditions that give rise to the need for accounting estimates and related disclosures that management failed to identify. ISA (UK) 315 (Revised July 2020) deals with circumstances where the auditor identifies risks of material misstatement that management failed to identify, including considering the implications for the auditor's evaluation of the entity's risk assessment process.[37]

Management's identification of the relevant methods, assumptions and sources of data (Ref: Para. 13(h)(ii)(a))

A36. If management has changed the method for making an accounting estimate, considerations may include whether the new method is, for example, more appropriate, is itself a response to changes in the environment or circumstances affecting the entity, or to changes in the requirements of the applicable financial reporting framework or regulatory environment, or whether management has another valid reason.

A37. If management has not changed the method for making an accounting estimate, considerations may include whether the continued use of the previous methods, assumptions and data is appropriate in view of the current environment or circumstances.

[37] ISA (UK) 315 (Revised July 2020), paragraph 22(b).

A37-1. For audits of financial statements of public interest entities, the auditor's obligations for auditing accounting estimates and related disclosures set out in this ISA (UK) may inform the auditor's assessment[37a] and communication[37b] in the additional report to the audit committee of the valuation methods applied to the various items in the financial statements.

Methods (Ref: Para. 13(h)(ii)(a)(i))

A38. The applicable financial reporting framework may prescribe the method to be used in making an accounting estimate. In many cases, however, the applicable financial reporting framework does not prescribe a single method, or the required measurement basis prescribes, or allows, the use of alternative methods.

Models

A39. Management may design and implement specific controls around models used for making accounting estimates, whether management's own model or an external model. When the model itself has an increased level of complexity or subjectivity, such as an expected credit loss model or a fair value model using level 3 inputs, controls that address such complexity or subjectivity may be more likely to be identified as relevant to the audit. When complexity in relation to models is present, controls over data integrity are also more likely to be identified controls in accordance with ISA (UK) 315 (Revised July 2020). Factors that may be appropriate for the auditor to consider in obtaining an understanding of the model and related identified controls include the following:

- How management determines the relevance and accuracy of the model;
- The validation or back testing of the model, including whether the model is validated prior to use and revalidated at regular intervals to determine whether it remains suitable for its intended use. The entity's validation of the model may include evaluation of:
    - The model's theoretical soundness;
    - The model's mathematical integrity; and
    - The accuracy and completeness of the data and the appropriateness of data and assumptions used in the model;
- How the model is appropriately changed or adjusted on a timely basis for changes in market or other conditions and whether there are appropriate change control policies over the model;
- Whether adjustments, also referred to as overlays in certain industries, are made to the output of the model and whether such adjustments are appropriate in the circumstances in accordance with the requirements of the applicable financial reporting framework. When the adjustments are not appropriate, such adjustments may be indicators of possible management bias; and
- Whether the model is adequately documented, including its intended applications, limitations, key parameters, required data and assumptions, the

[37a] ISA (UK) 330 (Revised July 2017), paragraph 19-1.

[37b] ISA (UK) 260 (Revised November 2019), paragraph 16-2(l).

results of any validation performed on it and the nature of, and basis for, any adjustments made to its output.

Assumptions (Ref: Para. 13(h)(ii)(a)(ii))

A40. Matters that the auditor may consider in obtaining an understanding of how management selected the assumptions used in making the accounting estimates include, for example:

- The basis for management's selection and the documentation supporting the selection of the assumption. The applicable financial reporting framework may provide criteria or guidance to be used in the selection of an assumption.
- How management assesses whether the assumptions are relevant and complete.
- When applicable, how management determines that the assumptions are consistent with each other, with those used in other accounting estimates or areas of the entity's business activities, or with other matters that are:
    - Within the control of management (for example, assumptions about the maintenance programs that may affect the estimation of an asset's useful life), and whether they are consistent with the entity's business plans and the external environment; and
    - Outside the control of management (for example, assumptions about interest rates, mortality rates or potential judicial or regulatory actions).
- The requirements of the applicable financial reporting framework related to the disclosure of assumptions.

A41. With respect to fair value accounting estimates, assumptions vary in terms of the sources of the data and the basis for the judgments to support them, as follows:

(a) Those that reflect what marketplace participants would use in pricing an asset or liability, developed based on market data obtained from sources independent of the reporting entity.

(b) Those that reflect the entity's own judgments about what assumptions marketplace participants would use in pricing the asset or liability, developed based on the best data available in the circumstances.

In practice, however, the distinction between (a) and (b) may not always be apparent and distinguishing between them depends on understanding the sources of data and the basis for the judgments that support the assumption. Further, it may be necessary for management to select from a number of different assumptions used by different marketplace participants.

A42. Assumptions used in making an accounting estimate are referred to as significant assumptions in this ISA (UK) if a reasonable variation in the assumption would materially affect the measurement of the accounting estimate. A sensitivity analysis may be useful in demonstrating the degree to which the measurement varies based on one or more assumptions used in making the accounting estimate.

Inactive or illiquid markets

A43. When markets are inactive or illiquid, the auditor's understanding of how management selects assumptions may include understanding whether management has:

- Implemented appropriate policies for adapting the application of the method in such circumstances. Such adaptation may include making model adjustments or developing new models that are appropriate in the circumstances;
- Resources with the necessary skills or knowledge to adapt or develop a model, if necessary on an urgent basis, including selecting the valuation technique that is appropriate in such circumstances;
- The resources to determine the range of outcomes, given the uncertainties involved, for example by performing a sensitivity analysis;
- The means to assess how, when applicable, the deterioration in market conditions has affected the entity's operations, environment and relevant business risks and the implications for the entity's accounting estimates, in such circumstances; and
- An appropriate understanding of how the price data, and the relevance thereof, from particular external information sources may vary in such circumstances.

Data (Ref: Para. 13(h)(ii)(a)(iii))

A44. Matters that the auditor may consider in obtaining an understanding of how management selects the data on which the accounting estimates are based include:

- The nature and source of the data, including information obtained from an external information source.
- How management evaluates whether the data is appropriate.
- The accuracy and completeness of the data.
- The consistency of the data used with data used in previous periods.
- The complexity of IT applications or other aspects of the entity's IT environment used to obtain and process the data, including when this involves handling large volumes of data.
- How the data is obtained, transmitted and processed and how its integrity is maintained.

How management understands and addresses estimation uncertainty (Ref: Para. 13(h)(ii)(b)–13(h)(ii)(c))

A45. Matters that may be appropriate for the auditor to consider relating to whether and how management understands the degree of estimation uncertainty include, for example:

- Whether, and if so, how management identified alternative methods, significant assumptions or sources of data that are appropriate in the context of the applicable financial reporting framework.
- Whether, and if so, how management considered alternative outcomes by, for example, performing a sensitivity analysis to determine the effect of changes in the significant assumptions or the data used in making the accounting estimate.

A46. The requirements of the applicable financial reporting framework may specify the approach to selecting management's point estimate from the reasonably possible measurement outcomes. Financial reporting frameworks may recognize that the appropriate amount is one that is appropriately selected from the reasonably possible

measurement outcomes and, in some cases, may indicate that the most relevant amount may be in the central part of that range.

A47. For example, with respect to fair value estimates, IFRS 13[38] indicates that, if multiple valuation techniques are used to measure fair value, the results (i.e., respective indications of fair value) shall be evaluated considering the reasonableness of the range of values indicated by those results. A fair value measurement is the point within that range that is most representative of fair value in the circumstances. In other cases, the applicable financial reporting framework may specify the use of a probability-weighted average of the reasonably possible measurement outcomes, or of the measurement amount that is most likely or that is more likely than not.

A48. The applicable financial reporting framework may prescribe disclosures or disclosure objectives related to accounting estimates, and some entities may choose to disclose additional information. These disclosures or disclosure objectives may address, for example:

- The method of estimation used, including any applicable model and the basis for its selection.
- Information that has been obtained from models, or from other calculations used to determine estimates recognized or disclosed in the financial statements, including information relating to the underlying data and assumptions used in those models, such as:
    - Assumptions developed internally; or
    - Data, such as interest rates, that are affected by factors outside the control of the entity.
- The effect of any changes to the method of estimation from the prior period.
- The sources of estimation uncertainty.
- Fair value information.
- Information about sensitivity analyses derived from financial models that demonstrates that management has considered alternative assumptions.

A49. In some cases, the applicable financial reporting framework may require specific disclosures regarding estimation uncertainty, for example:

- The disclosure of information about the assumptions made about the future and other major sources of estimation uncertainty that give rise to a higher likelihood or magnitude of material adjustment to the carrying amounts of assets and liabilities after the period end. Such requirements may be described using terms such as "Key Sources of Estimation Uncertainty" or "Critical Accounting Estimates". They may relate to accounting estimates that require management's most difficult, subjective or complex judgments. Such judgments may be more subjective and complex, and accordingly the potential for a consequential material adjustment to the carrying amounts of assets and liabilities may increase, with the number of items of data and assumptions affecting the possible future resolution of the estimation uncertainty. Information that may be disclosed includes:

[38] IFRS 13, Fair Value Measurement, paragraph 63.

- The nature of the assumption or other source of estimation uncertainty;
- The sensitivity of carrying amounts to the methods and assumptions used, including the reasons for the sensitivity;
- The expected resolution of an uncertainty and the range of reasonably possible outcomes in respect of the carrying amounts of the assets and liabilities affected; and
- An explanation of changes made to past assumptions concerning those assets and liabilities, if the uncertainty remains unresolved.

- The disclosure of the range of possible outcomes, and the assumptions used in determining the range.
- The disclosure of specific information, such as:
  - Information regarding the significance of fair value accounting estimates to the entity's financial position and performance; and
  - Disclosures regarding market inactivity or illiquidity.
- Qualitative disclosures such as the exposures to risk and how they arise, the entity's objectives, policies and procedures for managing the risk and the methods used to measure the risk and any changes from the previous period of these qualitative concepts.
- Quantitative disclosures such as the extent to which the entity is exposed to risk, based on information provided internally to the entity's key management personnel, including credit risk, liquidity risk and market risk.

Identified Controls over management's process for making accounting estimates
(Ref: Para. 13(i))

A50. The auditor's judgment in identifying controls in the control activities component, and therefore the need to evaluate the design of those controls and determine whether they have been implemented, relates to management's process described in paragraph 13(h)(ii). The auditor may not identify controls in relation to all aspects of paragraph 13(h)(ii).

A51. As part of identifying the controls and evaluating their design and determining whether they have been implemented, the auditor may consider:

- How management determines the appropriateness of the data used to develop the accounting estimates, including when management uses an external information source or data from outside the general and subsidiary ledgers.
- The review and approval of accounting estimates, including the assumptions or data used in their development, by appropriate levels of management and, where appropriate, those charged with governance.
- The segregation of duties between those responsible for making the accounting estimates and those committing the entity to the related transactions, including whether the assignment of responsibilities appropriately takes account of the nature of the entity and its products or services. For example, in the case of a large financial institution, relevant segregation of duties may consist of an independent function responsible for estimation and validation of fair value

pricing of the entity's financial products staffed by individuals whose remuneration is not tied to such products.

- The effectiveness of the design of the controls. Generally, it may be more difficult for management to design controls that address subjectivity and estimation uncertainty in a manner that effectively prevents, or detects and corrects, material misstatements, than it is to design controls that address complexity. Controls that address subjectivity and estimation uncertainty may need to include more manual elements, which may be less reliable than automated controls as they can be more easily bypassed, ignored or overridden by management. The design effectiveness of controls addressing complexity may vary depending on the reason for, and the nature of, the complexity. For example, it may be easier to design more effective controls related to a method that is routinely used or over the integrity of data.

A52. When management makes extensive use of information technology in making an accounting estimate, identified controls in the controls activities component are likely to include general IT controls and information processing controls. Such controls may address risks related to:

- Whether the IT applications or other aspects of the IT environment has the capability and is appropriately configured to process large volumes of data;
- Complex calculations in applying a method. When diverse IT applications are required to process complex transactions, regular reconciliations between the IT applications are made, in particular when the IT applications do not have automated interfaces or may be subject to manual intervention;
- Whether the design and calibration of models is periodically evaluated;
- The complete and accurate extraction of data regarding accounting estimates from the entity's records or from external information sources;
- Data, including the complete and accurate flow of data through the entity's information system, the appropriateness of any modification to the data used in making accounting estimates, the maintenance of the integrity and security of the data;
- When using external information sources, risks related to processing or recording the data;
- Whether management has controls around access, change and maintenance of individual models to maintain a strong audit trail of the accredited versions of models and to prevent unauthorized access or amendments to those models; and
- Whether there are appropriate controls over the transfer of information relating to accounting estimates into the general ledger, including appropriate controls over journal entries.

A53. In some industries, such as banking or insurance, the term governance may be used to describe activities within the control environment, the entity’s process to monitor the system of internal control, and other components of the system of internal control, as described in ISA (UK) 315 (Revised July 2020).[39]

[39] ISA (UK) 315 (Revised July 2020), Appendix 3.

A54. For entities with an internal audit function, its work may be particularly helpful to the auditor in obtaining an understanding of:

- The nature and extent of management's use of accounting estimates;
- The design and implementation of controls that address the risks related to the data, assumptions and models used to make the accounting estimates;
- The aspects of the entity's information system that generate the data on which the accounting estimates are based; and
- How new risks relating to accounting estimates are identified, assessed and managed.

Reviewing the Outcome or Re-Estimation of Previous Accounting Estimates (Ref: Para. 14)

A55. A review of the outcome or re-estimation of previous accounting estimates (retrospective review) assists in identifying and assessing the risks of material misstatement when previous accounting estimates have an outcome through transfer or realization of the asset or liability in the current period, or are re-estimated for the purpose of the current period. Through performing a retrospective review, the auditor may obtain:

- Information regarding the effectiveness of management's previous estimation process, from which the auditor can obtain audit evidence about the likely effectiveness of management's current process.
- Audit evidence of matters, such as the reasons for changes that may be required to be disclosed in the financial statements.
- Information regarding the complexity or estimation uncertainty pertaining to the accounting estimates.
- Information regarding the susceptibility of accounting estimates to, or that may be an indicator of, possible management bias. The auditor's professional skepticism assists in identifying such circumstances or conditions and in determining the nature, timing and extent of further audit procedures.

A56. A retrospective review may provide audit evidence that supports the identification and assessment of the risks of material misstatement in the current period. Such a retrospective review may be performed for accounting estimates made for the prior period's financial statements, or may be performed over several periods or a shorter period (such as half-yearly or quarterly). In some cases, a retrospective review over several periods may be appropriate when the outcome of an accounting estimate is resolved over a longer period.

A57. A retrospective review of management judgments and assumptions related to significant accounting estimates is required by ISA (UK) 240 (Revised May 2021).[40] As a practical matter, the auditor's review of previous accounting estimates as a risk assessment procedure in accordance with this ISA (UK) may be carried out in conjunction with the review required by ISA (UK) 240 (Revised May 2021).

A58. Based on the auditor's previous assessment of the risks of material misstatement, for example, if inherent risk is assessed as higher for one or more risks of material

[40] ISA (UK) 240 (Revised May 2021), *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements*, paragraph 33(b)(ii).

misstatement, the auditor may judge that a more detailed retrospective review is required. As part of the detailed retrospective review, the auditor may pay particular attention, when practicable, to the effect of data and significant assumptions used in making the previous accounting estimates. On the other hand, for example, for accounting estimates that arise from the recording of routine and recurring transactions, the auditor may judge that the application of analytical procedures as risk assessment procedures is sufficient for purposes of the review.

A59. The measurement objective for fair value accounting estimates and other accounting estimates, based on current conditions at the measurement date, deals with perceptions about value at a point in time, which may change significantly and rapidly as the environment in which the entity operates changes. The auditor may therefore focus the review on obtaining information that may be relevant to identifying and assessing risks of material misstatement. For example, in some cases, obtaining an understanding of changes in marketplace participant assumptions that affected the outcome of a previous period's fair value accounting estimates may be unlikely to provide relevant audit evidence. In this case, audit evidence may be obtained by understanding the outcomes of assumptions (such as a cash flow projections) and understanding the effectiveness of management's prior estimation process that supports the identification and assessment of the risks of material misstatement in the current period.

A60. A difference between the outcome of an accounting estimate and the amount recognized in the previous period's financial statements does not necessarily represent a misstatement of the previous period's financial statements. However, such a difference may represent a misstatement if, for example, the difference arises from information that was available to management when the previous period's financial statements were finalized, or that could reasonably be expected to have been obtained and taken into account in the context of the applicable financial reporting framework.[41] Such a difference may call into question management's process for taking information into account in making the accounting estimate. As a result, the auditor may reassess any plan to test related controls and the related assessment of control risk or may determine that more persuasive audit evidence needs to be obtained about the matter. 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 in each case.

Specialized Skills or Knowledge (Ref: Para. 15)

A61. Matters that may affect the auditor's determination of whether the engagement team requires specialized skills or knowledge, include, for example:[42]

- The nature of the accounting estimates for a particular business or industry (for example, mineral deposits, agricultural assets, complex financial instruments, insurance contract liabilities).
- The degree of estimation uncertainty.
- The complexity of the method or model used.

41 ISA (UK) 560, Subsequent Events, paragraph 14.

42 ISA (UK) 220 (Revised July 2021), *Quality Management for an Audit of Financial Statements*, paragraphs 25–26 and ISA (UK) 300 (Revised June 2016), *Planning an Audit of Financial Statements*, paragraph 8(e).

- The complexity of the requirements of the applicable financial reporting framework relevant to accounting estimates, including whether there are areas known to be subject to differing interpretation or practice or areas where there are inconsistencies in how accounting estimates are made.
- The procedures the auditor intends to undertake in responding to assessed risks of material misstatement.
- The need for judgment about matters not specified by the applicable financial reporting framework.
- The degree of judgment needed to select data and assumptions.
- The complexity and extent of the entity's use of information technology in making accounting estimates.

The nature, timing and extent of the involvement of individuals with specialized skills and knowledge may vary throughout the audit.

A62. The auditor may not possess the specialized skills or knowledge necessary when the matter involved is in a field other than accounting or auditing (for example, valuation skills) and may need to use an auditor's expert.[43]

A63. Many accounting estimates do not require the application of specialized skills or knowledge. For example, specialized skills or knowledge may not be needed for a simple inventory obsolescence calculation. However, for example, for expected credit losses of a banking institution or an insurance contract liability for an insurance entity, the auditor is likely to conclude that it is necessary to apply specialized skills or knowledge.

Identifying and Assessing the Risks of Material Misstatement (Ref: Para. 4, 16)

A64. Identifying and assessing risks of material misstatement at the assertion level relating to accounting estimates is important for all accounting estimates, including not only those that are recognized in the financial statements, but also those that are included in the notes to the financial statements.

A65. Paragraph A42 of ISA (UK) 200 (Revised June 2016) states that the ISAs (UK) typically refer to the "risks of material misstatement" rather than to inherent risk and control risk separately. ISA (UK) 315 (Revised July 2020) requires a separate assessment of inherent risk and control risk to provide a basis for designing and performing further audit procedures to respond to the risks of material misstatement at the assertion level,[44] including significant risks, in accordance with ISA (UK) 330 (Revised July 2017).

A66. In identifying the risks of material misstatement and in assessing inherent risk for accounting estimates in accordance with ISA (UK) 315 (Revised July 2020),[45] the auditor is required to take into account the inherent risk factors that affect susceptibility to misstatement of assertions, and how they do so. The auditor's consideration of the inherent risk factors may also provide information to be used in:

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43 ISA (UK) 620 (Revised November 2019), *Using the Work of an Auditor's Expert.*

44 ISA (UK) 315 (Revised July 2020), paragraphs 31 and 34.

45 ISA (UK) 315 (Revised July 2020), paragraph 31(a).

- Assessing the likelihood and magnitude of misstatement (i.e., where inherent risk is assessed on the spectrum of inherent risk); and
- Determining the reasons for the assessment given to the risks of material misstatement at the assertion level, and that the auditor's further audit procedures in accordance with paragraph 18 are responsive to those reasons.

The interrelationships between the inherent risk factors are further explained in Appendix 1.

A67. The reasons for the auditor's assessment of inherent risk at the assertion level may result from one or more of the inherent risk factors of estimation uncertainty, complexity, subjectivity or other inherent risk factors. For example:

(a) Accounting estimates of expected credit losses are likely to be complex because the expected credit losses cannot be directly observed and may require the use of a complex model. The model may use a complex set of historical data and assumptions about future developments in a variety of entity specific scenarios that may be difficult to predict. Accounting estimates for expected credit losses are also likely to be subject to high estimation uncertainty and significant subjectivity in making judgments about future events or conditions. Similar considerations apply to insurance contract liabilities.

(b) An accounting estimate for an obsolescence provision for an entity with a wide range of different inventory types may require complex systems and processes, but may involve little subjectivity and the degree of estimation uncertainty may be low, depending on the nature of the inventory.

(c) Other accounting estimates may not be complex to make but may have high estimation uncertainty and require significant judgment, for example, an accounting estimate that requires a single critical judgment about a liability, the amount of which is contingent on the outcome of the litigation.

A68. The relevance and significance of inherent risk factors may vary from one estimate to another. Accordingly, the inherent risk factors may, either individually or in combination, affect simple accounting estimates to a lesser degree and the auditor may identify fewer risks or assess inherent risk close to the lower end of the spectrum of inherent risk.

A69. Conversely, the inherent risk factors may, either individually or in combination, affect complex accounting estimates to a greater degree, and may lead the auditor to assess inherent risk at the higher end of the spectrum of inherent risk. For these accounting estimates, the auditor's consideration of the effects of the inherent risk factors is likely to directly affect the number and nature of identified risks of material misstatement, the assessment of such risks, and ultimately the persuasiveness of the audit evidence needed in responding to the assessed risks. Also, for these accounting estimates the auditor's application of professional skepticism may be particularly important.

A70. Events occurring after the date of the financial statements may provide additional information relevant to the auditor's assessment of the risks of material misstatement at the assertion level. For example, the outcome of an accounting estimate may become known during the audit. In such cases, the auditor may assess or revise the assessment of the risks of material misstatement at the assertion level,[46] regardless

[46] ISA (UK) 315 (Revised July 2020), paragraph 37.

of how the inherent risk factors affect susceptibility of assertions to misstatement relating to the accounting estimate. Events occurring after the date of the financial statements also may influence the auditor's selection of the approach to testing the accounting estimate in accordance with paragraph 18. For example, for a simple bonus accrual that is based on a straightforward percentage of compensation for selected employees, the auditor may conclude that there is relatively little complexity or subjectivity in making the accounting estimate, and therefore may assess inherent risk at the assertion level close to the lower end of the spectrum of inherent risk. The payment of the bonuses subsequent to period end may provide sufficient appropriate audit evidence regarding the assessed risks of material misstatement at the assertion level.

A71. The auditor's assessment of control risk may be done in different ways depending on preferred audit techniques or methodologies. The control risk assessment may be expressed using qualitative categories (for example, control risk assessed as maximum, moderate, minimum) or in terms of the auditor's expectation of how effective the control(s) is in addressing the identified risk, that is, the planned reliance on the effective operation of controls. For example, if control risk is assessed as maximum, the auditor contemplates no reliance on the effective operation of controls. If control risk is assessed at less than maximum, the auditor contemplates reliance on the effective operation of controls.

Estimation Uncertainty (Ref: Para. 16(a))

A72. In taking into account the degree to which the accounting estimate is subject to estimation uncertainty, the auditor may consider:

- Whether the applicable financial reporting framework requires:
    - The use of a method to make the accounting estimate that inherently has a high level of estimation uncertainty. For example, the financial reporting framework may require the use of unobservable inputs.
    - The use of assumptions that inherently have a high level of estimation uncertainty, such as assumptions with a long forecast period, assumptions that are based on data that is unobservable and are therefore difficult for management to develop, or the use of various assumptions that are interrelated.
    - Disclosures about estimation uncertainty.
- The business environment. An entity may be active in a market that experiences turmoil or possible disruption (for example, from major currency movements or inactive markets) and the accounting estimate may therefore be dependent on data that is not readily observable.
- Whether it is possible (or practicable, insofar as permitted by the applicable financial reporting framework) for management:
    - To make a precise and reliable prediction about the future realization of a past transaction (for example, the amount that will be paid under a contingent contractual term), or about the incidence and impact of future events or conditions (for example, the amount of a future credit loss or the amount at which an insurance claim will be settled and the timing of its settlement); or

- To obtain precise and complete information about a present condition (for example, information about valuation attributes that would reflect the perspective of market participants at the date of the financial statements, to develop a fair value estimate).

A73. The size of the amount recognized or disclosed in the financial statements for an accounting estimate is not, in itself, an indicator of its susceptibility to misstatement because, for example, the accounting estimate may be understated.

A74. In some circumstances, the estimation uncertainty may be so high that a reasonable accounting estimate cannot be made. The applicable financial reporting framework may preclude recognition of an item in the financial statements, or its measurement at fair value. In such cases, there may be risks of material misstatement that relate not only to whether an accounting estimate should be recognized, or whether it should be measured at fair value, but also to the reasonableness of the disclosures. With respect to such accounting estimates, the applicable financial reporting framework may require disclosure of the accounting estimates and the estimation uncertainty associated with them (see paragraphs A112–A113, A143–A144).

A75. In some cases, the estimation uncertainty relating to an accounting estimate may cast significant doubt about the entity's ability to continue as a going concern. ISA (UK) 570 (Revised September 2019)[47] establishes requirements and provides guidance in such circumstances.

Complexity or Subjectivity (Ref: Para. 16(b))

The Degree to Which Complexity Affects the Selection and Application of the Method

A76. In taking into account the degree to which the selection and application of the method used in making the accounting estimate are affected by complexity, the auditor may consider:

- The need for specialized skills or knowledge by management which may indicate that the method used to make an accounting estimate is inherently complex and therefore the accounting estimate may have a greater susceptibility to material misstatement. There may be a greater susceptibility to material misstatement when management has developed a model internally and has relatively little experience in doing so, or uses a model that applies a method that is not established or commonly used in a particular industry or environment.
- The nature of the measurement basis required by the applicable financial reporting framework, which may result in the need for a complex method that requires multiple sources of historical and forward-looking data or assumptions, with multiple interrelationships between them. For example, an expected credit loss provision may require judgments about future credit repayments and other cash flows, based on consideration of historical experience data and the application of forward looking assumptions. Similarly, the valuation of an insurance contract liability may require judgments about future insurance contract payments to be projected based on historical experience and current and assumed future trends.

47 ISA (UK) 570, (Revised September 2019), *Going Concern.*

The Degree to Which Complexity Affects the Selection and Application of the Data

A77. In taking into account the degree to which the selection and application of the data used in making the accounting estimate are affected by complexity, the auditor may consider:

- The complexity of the process to derive the data, taking into account the relevance and reliability of the data source. Data from certain sources may be more reliable than from others. Also, for confidentiality or proprietary reasons, some external information sources will not (or not fully) disclose information that may be relevant in considering the reliability of the data they provide, such as the sources of the underlying data they used or how it was accumulated and processed.
- The inherent complexity in maintaining the integrity of the data. When there is a high volume of data and multiple sources of data, there may be inherent complexity in maintaining the integrity of data that is used to make an accounting estimate.
- The need to interpret complex contractual terms. For example, the determination of cash inflows or outflows arising from a commercial supplier or customer rebates may depend on very complex contractual terms that require specific experience or competence to understand or interpret.

The Degree to Which Subjectivity Affects the Selection and Application of the Method, Assumptions or Data

A78. In taking into account the degree to which the selection and application of method, assumptions or data are affected by subjectivity, the auditor may consider:

- The degree to which the applicable financial reporting framework does not specify the valuation approaches, concepts, techniques and factors to use in the estimation method.
- The uncertainty regarding the amount or timing, including the length of the forecast period. The amount and timing are a source of inherent estimation uncertainty, and give rise to the need for management judgment in selecting a point estimate, which in turn creates an opportunity for management bias. For example, an accounting estimate that incorporates forward looking assumptions may have a high degree of subjectivity which may be susceptible to management bias.

Other Inherent Risk Factors (Ref: Para. 16(b))

A79. The degree of subjectivity associated with an accounting estimate influences the susceptibility of the accounting estimate to misstatement due to management bias or other fraud risk factors insofar as they affect inherent risk. For example, when an accounting estimate is subject to a high degree of subjectivity, the accounting estimate is likely to be more susceptible to misstatement due to management bias or fraud and this may result in a wide range of possible measurement outcomes. Management may select a point estimate from that range that is inappropriate in the circumstances, or that is inappropriately influenced by unintentional or intentional management bias, and that is therefore misstated. For continuing audits, indicators of possible management bias identified during the audit of preceding periods may influence the planning and risk assessment procedures in the current period.

Significant Risks (Ref: Para. 17)

A80. The auditor's assessment of inherent risk, which takes into account the degree to which an accounting estimate is subject to, or affected by estimation uncertainty, complexity, subjectivity or other inherent risk factors, assists the auditor in determining whether any of the risks of material misstatement identified and assessed are a significant risk.

Responses to the Assessed Risks of Material Misstatement

The Auditor's Further Audit Procedures (Ref: Para. 18)

A81. In designing and performing further audit procedures the auditor may use any of the three testing approaches (individually or in combination) listed in paragraph 18. For example, when several assumptions are used to make an accounting estimate, the auditor may decide to use a different testing approach for each assumption tested.

Obtaining Relevant Audit Evidence Whether Corroborative or Contradictory

A82. Audit evidence comprises both information that supports and corroborates management's assertions, and any information that contradicts such assertions.[48] Obtaining audit evidence in an unbiased manner may involve obtaining evidence from multiple sources within and outside the entity. However, the auditor is not required to perform an exhaustive search to identify all possible sources of audit evidence.

A83. ISA (UK) 330 (Revised July 2017) requires the auditor to obtain more persuasive audit evidence the higher the auditor's assessment of the risk.[49] Therefore, the consideration of the nature or quantity of the audit evidence may be more important when inherent risks relating to an accounting estimate is assessed at the higher end of the spectrum of inherent risk.

Scalability

A84. The nature, timing and extent of the auditor's further audit procedures are affected by, for example:

- The assessed risks of material misstatement, which affect the persuasiveness of the audit evidence needed and influence the approach the auditor selects to audit an accounting estimate. For example, the assessed risks of material misstatement relating to the existence or valuation assertions may be lower for a straightforward accrual for bonuses that are paid to employees shortly after period end. In this situation, it may be more practical for the auditor to obtain sufficient appropriate audit evidence by evaluating events occurring up to the date of the auditor's report, rather than through other testing approaches.
- The reasons for the assessed risks of material misstatement.

When the Auditor Intends to Rely on the Operating Effectiveness of Controls (Ref: Para: 19)

A85. Testing the operating effectiveness of controls may be appropriate when inherent risk is assessed as higher on the spectrum of inherent risk, including for significant risks. This may be the case when the accounting estimate is subject to or affected by a high degree of complexity. When the accounting estimate is affected by a high degree of subjectivity, and therefore requires significant judgment by management, inherent

[48] ISA (UK) 500, paragraph A5.

[49] ISA (UK) 330 (Revised July 2017), paragraphs 7(b) and A19.

limitations in the effectiveness of the design of controls may lead the auditor to focus more on substantive procedures than on testing the operating effectiveness of controls.

A86. In determining the nature, timing and extent of testing of the operating effectiveness of controls relating to accounting estimates, the auditor may consider factors such as:

- The nature, frequency and volume of transactions;
- The effectiveness of the design of the controls, including whether controls are appropriately designed to respond to the assessed inherent risk, and the strength of governance;
- The importance of particular controls to the overall control objectives and processes in place at the entity, including the sophistication of the information system to support transactions;
- The monitoring of controls and identified deficiencies in internal control;
- The nature of the risks the controls are intended to address, for example, controls related to the exercise of judgment compared with controls over supporting data;
- The competency of those involved in the control activities;
- The frequency of performance of the control activities; and
- The evidence of performance of control activities.

Substantive Procedures Alone Cannot Provide Sufficient Appropriate Audit Evidence

A87. In some industries, such as the financial services industry, management makes extensive use of IT to conduct business. It may therefore be more likely that there are risks related to certain accounting estimates for which substantive procedures alone cannot provide sufficient appropriate audit evidence.

A88. Circumstances when risks for which substantive procedures alone cannot provide sufficient appropriate audit evidence at the assertion level may exist include:

- When controls are necessary to mitigate risks relating to the initiation, recording, processing, or reporting of information obtained from outside of the general and subsidiary ledgers.
- Information supporting one or more assertions is electronically initiated, recorded, processed, or reported. This is likely to be the case when there is a high volume of transactions or data, or a complex model is used, requiring the extensive use of information technology to ensure the accuracy and completeness of the information. A complex expected credit loss provision may be required for a financial institution or utility entity. For example, in the case of a utility entity, the data used in developing the expected credit loss provision may comprise many small balances resulting from a high volume of transactions. In these circumstances, the auditor may conclude that sufficient appropriate audit evidence cannot be obtained without testing controls around the model used to develop the expected credit loss provision.

In such cases, the sufficiency and appropriateness of the audit evidence may depend on the effectiveness of controls over the accuracy and completeness of the information.

A89. As part of the audit of the financial statements for certain entities (such as a bank or insurer), the auditor also may be required by law or regulation to undertake additional procedures in relation to, or to provide an assurance conclusion on, internal control. In these and other similar circumstances, the auditor may be able to use information obtained in performing such procedures as audit evidence, subject to determining whether subsequent changes have occurred that may affect its relevance to the audit.

Significant Risks (Ref: Para. 20)

A90. When the auditor's further audit procedures in response to a significant risk consist only of substantive procedures, ISA (UK) 330 (Revised July 2017)[50] requires that those procedures include tests of details. Such tests of details may be designed and performed under each of the approaches described in paragraph 18 of this ISA (UK) based on the auditor's professional judgment in the circumstances. Examples of tests of details for significant risks related to accounting estimates include:

- Examination, for example, examining contracts to corroborate terms or assumptions.
- Recalculation, for example, verifying the mathematical accuracy of a model.
- Agreeing assumptions used to supporting documentation, such as third-party published information.

Obtaining Audit Evidence from Events Occurring up to the Date of the Auditor's Report (Ref: Para. 21)

A91. In some circumstances, obtaining audit evidence from events occurring up to the date of the auditor's report may provide sufficient appropriate audit evidence to address the risks of material misstatement. For example, sale of the complete inventory of a discontinued product shortly after the period end may provide sufficient appropriate audit evidence relating to the estimate of its net realizable value at the period end. In other cases, it may be necessary to use this testing approach in connection with another approach in paragraph 18.

A92. For some accounting estimates, events occurring up to the date of the auditor's report are unlikely to provide sufficient appropriate audit evidence regarding the accounting estimate. For example, the conditions or events relating to some accounting estimates develop only over an extended period. Also, because of the measurement objective of fair value accounting estimates, information after the period-end may not reflect the events or conditions existing at the balance sheet date and therefore may not be relevant to the measurement of the fair value accounting estimate.

A93. Even if the auditor decides not to undertake this testing approach in respect of specific accounting estimates, the auditor is required to comply with ISA (UK) 560. ISA (UK) 560 requires the auditor to perform audit procedures designed to obtain sufficient appropriate audit evidence that all events occurring between the date of the financial statements and the date of the auditor's report that require adjustment of, or disclosure in, the financial statements have been identified[51] and appropriately reflected in the financial statements.[52] Because the measurement of many accounting estimates,

50 ISA (UK) 330 (Revised July 2017), paragraph 21.

51 ISA (UK) 560, paragraph 6.

52 ISA (UK) 560, paragraph 8.

other than fair value accounting estimates, usually depends on the outcome of future conditions, transactions or events, the auditor's work under ISA (UK) 560 is particularly relevant.

Testing How Management Made the Accounting Estimate (Ref: Para. 22)

A94. Testing how management made the accounting estimate may be an appropriate approach when, for example:

- The auditor's review of similar accounting estimates made in the prior period financial statements suggests that management's current period process is appropriate.
- The accounting estimate is based on a large population of items of a similar nature that individually are not significant.
- The applicable financial reporting framework specifies how management is expected to make the accounting estimate. For example, this may be the case for an expected credit loss provision.
- The accounting estimate is derived from the routine processing of data.

Testing how management made the accounting estimate may also be an appropriate approach when neither of the other testing approaches is practical to perform, or may be an appropriate approach in combination with one of the other testing approaches.

Changes in Methods, Significant Assumptions and the Data from Prior Periods
(Ref: Para. 23(a), 24(a), 25(a))

A95. When a change from prior periods in a method, significant assumption, or the data is not based on new circumstances or new information, or when significant assumptions are inconsistent with each other and with those used in other accounting estimates, or with related assumptions used in other areas of the entity's business activities, the auditor may need to have further discussions with management about the circumstances and, in doing so, challenge management regarding the appropriateness of the assumptions used.

Indicators of Management Bias (Ref: Para. 23(b), 24(b), 25(b))

A96. When the auditor identifies indicators of possible management bias, the auditor may need a further discussion with management and may need to reconsider whether sufficient appropriate audit evidence has been obtained that the method, assumptions and data used were appropriate and supportable in the circumstances. An example of an indicator of management bias for a particular accounting estimate may be when management has developed an appropriate range for several different assumptions, and in each case the assumption used was from the end of the range that resulted in the most favorable measurement outcome.

Methods

The selection of the method (Ref: Para. 23(a))

A97. Relevant considerations for the auditor regarding the appropriateness of the method selected in the context of the applicable financial reporting framework, and, if applicable, the appropriateness of changes from the prior period may include:

- Whether management's rationale for the method selected is appropriate;

- Whether the method is appropriate in the circumstances given the nature of the accounting estimate, the requirements of the applicable financial reporting framework, other available valuation concepts or techniques, regulatory requirements, and the business, industry and environment in which the entity operates;
- When management has determined that different methods result in a range of significantly different estimates, how management has investigated the reasons for these differences; and
- Whether the change is based on new circumstances or new information. When this is not the case, the change may not be reasonable or in compliance with the applicable financial reporting framework. Arbitrary changes result in inconsistent financial statements over time and may give rise to financial statement misstatements or may be an indicator of possible management bias (see also paragraphs A133–A136).

These matters are important when the applicable financial reporting framework does not prescribe the method of measurement or allows multiple methods.

Complex modelling (Ref: Para. 23(d))

A98. A model, and the related method, is more likely to be complex when:

- Understanding and applying the method, including designing the model and selecting and using appropriate data and assumptions, requires specialized skills or knowledge;
- It is difficult to obtain data needed for use in the model because there are restrictions on the availability or observability of, or access to, data; or
- It is difficult to maintain the integrity (e.g., accuracy, consistency, or completeness) of the data and assumptions in using the model due to multiple valuation attributes, multiple relationships between them, or multiple iterations of the calculation.

A99. Matters that the auditor may consider when management uses a complex model include, for example, whether:

- The model is validated prior to usage or when there has been a change to the model, with periodic reviews to ensure it is still suitable for its intended use. The entity's validation process may include evaluation of:
  - The model's theoretical soundness;
  - The model's mathematical integrity;
  - The accuracy and completeness of the model's data and assumptions; and
  - The model's output as compared to actual transactions.
- Appropriate change control policies and procedures exist.
- Management uses appropriate skills and knowledge in using the model.

These considerations may also be useful for a method that does not involve complex modelling.

A100. Management may make adjustments to the output of the model to meet the requirements of the applicable financial reporting framework. In some industries these

adjustments are referred to as overlays. In the case of fair value accounting estimates, it may be relevant to consider whether adjustments to the output of the model, if any, reflect the assumptions marketplace participants would use in similar circumstances.

Maintenance of integrity of significant assumptions and the data used in applying the method (Ref: Para. 23(e))

A101. Maintaining the integrity of significant assumptions and the data in applying the method refers to the maintenance of the accuracy and completeness of the data and assumptions through all stages of information processing. A failure to maintain such integrity may result in corruption of the data and assumptions and may give rise to misstatements. In this regard, relevant considerations for the auditor may include whether the data and assumptions are subject to all changes intended by management, and not subject to any unintended changes, during activities such as input, storage, retrieval, transmission or processing.

Significant Assumptions (Ref: Para. 24)

A102. Relevant considerations for the auditor regarding the appropriateness of the significant assumptions in the context of the applicable financial reporting framework, and, if applicable, the appropriateness of changes from the prior period may include:

- Management's rationale for the selection of the assumption;
- Whether the assumption is appropriate in the circumstances given the nature of the accounting estimate, the requirements of the applicable financial reporting framework, and the business, industry and environment in which the entity operates; and
- Whether a change from prior periods in selecting an assumption is based on new circumstances or new information. When it is not, the change may not be reasonable nor in compliance with the applicable financial reporting framework. Arbitrary changes in an accounting estimate may give rise to material misstatements of the financial statements or may be an indicator of possible management bias (see paragraphs A133–A136).

A103. Management may evaluate alternative assumptions or outcomes of accounting estimates, which may be accomplished through a number of approaches depending on the circumstances. One possible approach is 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 may be variation because different market participants will use different assumptions. A sensitivity analysis may lead to the development of a number of outcome scenarios, sometimes characterized as a range of outcomes by management, and including 'pessimistic' and 'optimistic' scenarios.

A104. Through the knowledge obtained in performing the audit, the auditor may become aware of or may have obtained an understanding of assumptions used in other areas of the entity's business. Such matters may include, for example, business prospects, assumptions in strategy documents and future cash flows. Also, if the engagement partner has performed other engagements for the entity, ISA (UK) 315 (Revised July 2020)[53] requires the engagement partner to consider whether information obtained

[53] ISA (UK) 315 (Revised July 2020), paragraph 8.

from those other engagements is relevant to identifying risks of material misstatement. This information may also be useful to consider in addressing whether significant assumptions are consistent with each other and with those used in other accounting estimates.

A105. The appropriateness of the significant assumptions in the context of the requirements of the applicable financial reporting framework may depend on management's intent and ability to carry out certain courses of action. Management often documents plans and intentions relevant to specific assets or liabilities and the applicable financial reporting framework may require management to do so. The nature and extent of audit evidence to be obtained about management's intent and ability is a matter of professional judgment. When applicable, the auditor's procedures may include the following:

- Review of management's history of carrying out its stated intentions.
- Inspection of written plans and other documentation, including, when applicable, formally approved budgets, authorizations or minutes.
- Inquiry of management about its reasons for a particular course of action.
- Review of events occurring subsequent to the date of the financial statements and up to the date of the auditor's report.
- Evaluation of the entity's ability to carry out a particular course of action given the entity's economic circumstances, including the implications of its existing commitments and legal, regulatory, or contractual restrictions that could affect the feasibility of management's actions.
- Consideration of whether management has met the applicable documentation requirements, if any, of the applicable financial reporting framework.

Certain financial reporting frameworks, however, may not permit management's intentions or plans to be taken into account when making an accounting estimate. This is often the case for fair value accounting estimates because their measurement objective requires that significant assumptions reflect those used by marketplace participants.

Data (Ref: Para. 25(a))

A106. Relevant considerations for the auditor regarding the appropriateness of the data selected for use in the context of the applicable financial reporting framework, and, if applicable, the appropriateness of the changes from the prior period may include:

- Management's rationale for the selection of the data;
- Whether the data is appropriate in the circumstances given the nature of the accounting estimate, the requirements of the applicable financial reporting framework, and the business, industry and environment in which the entity operates; and
- Whether the change from prior periods in the sources or items of data selected or data selected, is based on new circumstances or new information. When it is not, it is unlikely to be reasonable nor in compliance with the applicable financial reporting framework. Arbitrary changes in an accounting estimate result in inconsistent financial statements over time and may give rise to financial

statement misstatements or may be an indicator of possible management bias (see paragraphs A133–A136).

Relevance and reliability of the data (Ref: Para. 25(c))

A107. When using information produced by the entity, ISA (UK) 500 requires the auditor to evaluate whether the information is sufficiently reliable for the auditor's purposes, including as necessary in the circumstances, to obtain audit evidence about the accuracy and completeness of the information and evaluating whether the information is sufficiently precise and detailed for the auditor's purposes.[54]

Complex legal or contractual terms (Ref: Para. 25(d))

A108. Procedures that the auditor may consider when the accounting estimate is based on complex legal or contractual terms include:

- Considering whether specialized skills or knowledge are needed to understand or interpret the contract;
- Inquiring of the entity's legal counsel regarding the legal or contractual terms; and
- Inspecting the underlying contracts to:
  - Evaluate, the underlying business purpose for the transaction or agreement; and
  - Consider whether the terms of the contracts are consistent with management's explanations.

Management's Selection of a Point Estimate and Related Disclosures about Estimation Uncertainty

Management's steps to understand and address estimation uncertainty (Ref: Para. 26(a))

A109. Relevant considerations regarding whether management has taken appropriate steps to understand and address estimation uncertainty may include whether management has:

(a) Understood the estimation uncertainty, through identifying the sources, and assessing the degree of inherent variability in the measurement outcomes and the resulting range of reasonably possible measurement outcomes;

(b) Identified the degree to which, in the measurement process, complexity or subjectivity affect the risk of material misstatement, and addressed the resulting potential for misstatement through applying:

(i) Appropriate skills and knowledge in making accounting estimates; and

(ii) Professional judgment, including by identifying and addressing susceptibility to management bias; and

(c) Addressed estimation uncertainty through appropriately selecting management's point estimate and related disclosures that describe the estimation uncertainty.

[54] ISA (UK) 500, paragraph 9.

The selection of management's point estimate and related disclosures of estimation uncertainty (Ref: Para. 26(b))

A110. Matters that may be relevant regarding the selection of management's point estimate and the development of related disclosures about estimation uncertainty include whether:

- The methods and data used were selected appropriately, including when alternative methods for making the accounting estimate and alternative sources of data were available.
- Valuation attributes used were appropriate and complete.
- The assumptions used were selected from a range of reasonably possible amounts and were supported by appropriate data that is relevant and reliable.
- The data used was appropriate, relevant and reliable, and the integrity of that data was maintained.
- The calculations were applied in accordance with the method and were mathematically accurate.
- Management's point estimate is appropriately chosen from the reasonably possible measurement outcomes.
- The related disclosures appropriately describe the amount as an estimate and explain the nature and limitations of the estimation process, including the variability of the reasonably possible measurement outcomes.

A111. Relevant considerations for the auditor regarding the appropriateness of management's point estimate, may include:

- When the requirements of the applicable financial reporting framework prescribe the point estimate that is to be used after consideration of the alternative outcomes and assumptions, or prescribes a specific measurement method, whether management has followed the requirements of the applicable financial reporting framework.
- When the applicable financial reporting framework has not specified how to select an amount from reasonably possible measurement outcomes, whether management has exercised judgment, taking into account the requirements of the applicable financial reporting framework.

A112. Relevant considerations for the auditor regarding management's disclosures about estimation uncertainty include the requirements of the applicable financial reporting framework, which may require disclosures:

- That describe the amount as an estimate and explain the nature and limitations of the process for making it, including the variability in reasonably possible measurement outcomes. The framework also may require additional disclosures to meet a disclosure objective.[55]
- About significant accounting policies related to accounting estimates. Depending on the circumstances, relevant accounting policies may include matters such as the specific principles, bases, conventions, rules and practices applied in preparing and presenting accounting estimates in the financial statements.

[55] IFRS 13, *Fair Value Measurement*, paragraph 92.

- About significant or critical judgments (for example, those that had the most significant effect on the amounts recognized in the financial statements) as well as significant forward-looking assumptions or other sources of estimation uncertainty.

In certain circumstances, additional disclosures beyond those explicitly required by the financial reporting framework may be needed in order to achieve fair presentation, or in the case of a compliance framework, for the financial statements not to be misleading.

A113. The greater the degree to which an accounting estimate is subject to estimation uncertainty, the more likely the risks of material misstatement will be assessed as higher and therefore the more persuasive the audit evidence needs to be to determine, in accordance with paragraph 35, whether management's point estimate and related disclosures about estimation uncertainty are reasonable in the context of the applicable financial reporting framework, or are misstated.

A114. If the auditor's consideration of estimation uncertainty associated with an accounting estimate, and its related disclosure, is a matter that required significant auditor attention, then this may constitute a key audit matter.[56]

When Management Has Not Taken Appropriate Steps to Understand and Address Estimation Uncertainty (Ref: Para. 27)

A115. When the auditor determines that management has not taken appropriate steps to understand and address estimation uncertainty, additional procedures that the auditor may request management to perform to understand estimation uncertainty may include, for example, consideration of alternative assumptions or the performance of a sensitivity analysis.

A116. In considering whether it is practicable to develop a point estimate or range, matters the auditor may need to take into account include whether the auditor could do so without compromising independence requirements. This may include relevant ethical requirements that address prohibitions on assuming management responsibilities.

A117. If, after considering management's response, the auditor determines that it is not practicable to develop an auditor's point estimate or range, the auditor is required to evaluate the implications for the audit or the auditor's opinion on the financial statements in accordance with paragraph 34.

Developing an Auditor's Point Estimate or Using an Auditor's Range (Ref: Para. 28–29)

A118. Developing an auditor's point estimate or range to evaluate management's point estimate and related disclosures about estimation uncertainty may be an appropriate approach when, for example:

- The auditor's review of similar accounting estimates made in the prior period financial statements suggests that management's current period process is not expected to be effective.
- The entity's controls within and over management's process for making accounting estimates are not well designed or properly implemented.

[56] ISA (UK) 701 (Revised November 2019), *Communicating Key Audit Matters in the Independent Auditor's Report.*

- Events or transactions between the period end and the date of the auditor's report have not been properly taken into account, when it is appropriate for management to do so, and such events or transactions appear to contradict management's point estimate.
- There are appropriate alternative assumptions or sources of relevant data that can be used in developing an auditor's point estimate or a range.
- Management has not taken appropriate steps to understand or address the estimation uncertainty (see paragraph 27).

A119. The decision to develop a point estimate or range also may be influenced by the applicable financial reporting framework, which may prescribe the point estimate that is to be used after consideration of the alternative outcomes and assumptions, or prescribe a specific measurement method (for example, the use of a discounted probability-weighted expected value, or the most likely outcome).

A120. The auditor's decision as to whether to develop a point estimate rather than a range may depend on the nature of the estimate and the auditor's judgment in the circumstances. For example, the nature of the estimate may be such that there is expected to be less variability in the reasonably possible outcomes. In these circumstances, developing a point estimate may be an effective approach, particularly when it can be developed with a higher degree of precision.

A121. The auditor may develop a point estimate or a range in a number of ways, for example, by:

- Using a different model than the one used by management, for example, one that is commercially available for use in a particular sector or industry, or a proprietary or auditor-developed model.
- Using management's model but developing alternative assumptions or data sources to those used by management.
- Using the auditor's own method but developing alternative assumptions to those used by management.
- Employing or engaging a person with specialized expertise to develop or execute a model, or to provide relevant assumptions.
- Consideration of other comparable conditions, transactions or events, or, where relevant, markets for comparable assets or liabilities.

A122. The auditor also may develop a point estimate or range for only part of the accounting estimate (for example, for a particular assumption, or when only a certain part of the accounting estimate is giving rise to the risk of material misstatement).

A123. When using the auditor's own methods, assumptions or data to develop a point estimate or range, the auditor may obtain evidence about the appropriateness of management's methods, assumptions or data. For example, if the auditor uses the auditor's own assumptions in developing a range to evaluate the reasonableness of management's point estimate, the auditor may also develop a view about whether management's judgments in selecting the significant assumptions used in making the accounting estimate give rise to indicators of possible management bias.

A124. The requirement in paragraph 29(a) for the auditor to determine that the range includes only amounts that are supported by sufficient appropriate audit evidence does not

mean that the auditor is expected to obtain audit evidence to support each possible outcome in the range individually. Rather, the auditor is likely to obtain evidence to determine that the points at both ends of the range are reasonable in the circumstances, thereby supporting that amounts falling between those two points also are reasonable.

A125. The size of the auditor's range may be multiples of materiality for the financial statements as a whole, particularly when materiality is based on operating results (for example, pre-tax income) and this measure is relatively small in relation to assets or other balance sheet measures. This situation is more likely to arise in circumstances when the estimation uncertainty associated with the accounting estimate is itself multiples of materiality, which is more common for certain types of accounting estimates or in certain industries, such as insurance or banking, where a high degree of estimation uncertainty is more typical and there may be specific requirements in the applicable financial reporting framework in that regard. Based on the procedures performed and audit evidence obtained in accordance with the requirements of this ISA (UK), the auditor may conclude that a range that is multiples of materiality is, in the auditor's judgment, appropriate in the circumstances. When this is the case, the auditor's evaluation of the reasonableness of the disclosures about estimation uncertainty becomes increasingly important, particularly whether such disclosures appropriately convey the high degree of estimation uncertainty and the range of possible outcomes. Paragraphs A139–A144 include additional considerations that may be relevant in these circumstances.

Other Considerations Relating to Audit Evidence (Ref: Para. 30)

A126. Information to be used as audit evidence, regarding risks of material misstatement relating to accounting estimates, may have been produced by the entity, prepared using the work of a management's expert, or provided by an external information source.

External Information Sources

A127. As explained in ISA (UK) 500,[57] the reliability of information from an external information source is influenced by its source, its nature, and the circumstances under which it is obtained. Consequently, the nature and extent of the auditor's further audit procedures to consider the reliability of the information used in making an accounting estimate may vary depending on the nature of these factors. For example:

- When market or industry data, prices, or pricing related data, are obtained from a single external information source, specializing in such information, the auditor may seek a price from an alternative independent source with which to compare.
- When market or industry data, prices, or pricing related data, are obtained from multiple independent external information sources and points to consensus across those sources, the auditor may need to obtain less evidence about the reliability of the data from an individual source.
- When information obtained from multiple information sources points to divergent market views the auditor may seek to understand the reasons for the diversity in views. The diversity may result from the use of different methods, assumptions, or data. For example, one source may be using current prices and another source

[57] ISA (UK) 500, Paragraph A35.

using future prices. When the diversity relates to estimation uncertainty, the auditor is required by paragraph 26(b) to obtain sufficient appropriate audit evidence about whether, in the context of the applicable financial reporting framework, the disclosures in the financial statements that describe the estimation uncertainty are reasonable. In such cases professional judgment is also important in considering information about the methods, assumptions or data applied.

- When information obtained from an external information source has been developed by that source using its own model(s). Paragraph A33f of ISA (UK) 500 provides relevant guidance.

A128. For fair value accounting estimates, additional considerations of the relevance and reliability of information obtained from external information sources may include:

(a) Whether fair values are based on trades of the same instrument or active market quotations;

(b) When the fair values are based on transactions of comparable assets or liabilities, how those transactions are identified and considered comparable;

(c) When there are no transactions either for the asset or liability or comparable assets or liabilities, how the information was developed including whether the inputs developed and used represent the assumptions that market participants would use when pricing the asset or liability, if applicable; and

(d) When the fair value measurement is based on a broker quote, whether the broker quote:

(i) Is from a market maker who transacts in the same type of financial instrument;

(ii) Is binding or nonbinding, with more weight placed on quotes based on binding offers; and

(iii) Reflects market conditions as of the date of the financial statements, when required by the applicable financial reporting framework.

A129. When information from an external information source is used as audit evidence, a relevant consideration for the auditor may be whether information can be obtained, or whether the information is sufficiently detailed to understand the methods, assumptions and other data used by the external information source. This may be limited in some respects and consequently influence the auditor's consideration of the nature, timing and extent of procedures to perform. For example, pricing services often provide information about their methods and assumptions by asset class rather than individual securities. Brokers often provide only limited information about their inputs and assumptions when providing broker indicative quotes for individual securities. Paragraph A33g of ISA (UK) 500 provides guidance with respect to restrictions placed by the external information source on the provision of supporting information.

Management's Expert

A130. Assumptions relating to accounting estimates that are made or identified by a management's expert become management's assumptions when used by management in making an accounting estimate. Accordingly, the auditor applies the relevant requirements in this ISA (UK) to those assumptions.

A131. If the work of a management's expert involves the use of methods or sources of data relating to accounting estimates, or developing or providing findings or conclusions relating to a point estimate or related disclosures for inclusion in the financial statements, the requirements in paragraphs 21–29 of this ISA (UK) may assist the auditor in applying paragraph 8(c) of ISA (UK) 500.

Service Organizations

A132. ISA (UK) 402[58] deals with the auditor's understanding of the services provided by a service organization, including internal control, as well as the auditor's responses to assessed risks of material misstatement. When the entity uses the services of a service organization in making accounting estimates, the requirements and guidance in ISA (UK) 402 may therefore assist the auditor in applying the requirements of this ISA (UK).

Indicators of Possible Management Bias (Ref: Para. 32)

A133. Management bias may be difficult to detect at an account level and may only be identified by the auditor when considering groups of accounting estimates, all accounting estimates in aggregate, or when observed over a number of accounting periods. For example, if accounting estimates included in the financial statements are considered to be individually reasonable but management's point estimates consistently trend toward one end of the auditor's range of reasonable outcomes that provide a more favorable financial reporting outcome for management, such circumstances may indicate possible bias by management.

A134. Examples of indicators of possible management bias with respect to accounting estimates include:

- Changes in an accounting estimate, or the method for making it, when management has made a subjective assessment that there has been a change in circumstances.
- Selection or development of significant assumptions or the data that yield a point estimate favorable for management objectives.
- Selection of a point estimate that may indicate a pattern of optimism or pessimism.

When such indicators are identified, there may be a risk of material misstatement either at the assertion or financial statement level. Indicators of possible management bias themselves do not constitute misstatements for purposes of drawing conclusions on the reasonableness of individual accounting estimates. However, in some cases the audit evidence may point to a misstatement rather than simply an indicator of management bias.

A135. Indicators of possible management bias may affect the auditor's conclusion as to whether the auditor's risk assessment and related responses remain appropriate. The auditor may also need to consider the implications for other aspects of the audit, including the need to further question the appropriateness of management's judgments in making accounting estimates. Further, indicators of possible management bias may affect the auditor's conclusion as to whether the financial statements as a whole are

[58] ISA (UK) 402, *Audit Considerations Relating to an Entity Using a Service Organization.*

free from material misstatement, as discussed in ISA (UK) 700 (Revised November 2019).[59]

A136. In addition, in applying ISA (UK) 240 (Revised May 2021), the auditor is required to evaluate whether management's judgments and decisions in making the accounting estimates included in the financial statements indicate a possible bias that may represent a material misstatement due to fraud.[60] Fraudulent financial reporting is often accomplished through intentional misstatement of accounting estimates, which may include intentionally understating or overstating accounting estimates. Indicators of possible management bias that may also be a fraud risk factor, may cause the auditor to reassess whether the auditor's risk assessments, in particular the assessment of fraud risks, and related responses remain appropriate.

Overall Evaluation Based on Audit Procedures Performed (Ref: Para. 33)

A137. As the auditor performs planned audit procedures, the audit evidence obtained may cause the auditor to modify the nature, timing or extent of other planned audit procedures.[61] In relation to accounting estimates, information may come to the auditor's attention through performing procedures to obtain audit evidence that differs significantly from the information on which the risk assessment was based. For example, the auditor may have identified that the only reason for an assessed risk of material misstatement is the subjectivity involved in making the accounting estimate. However, while performing procedures to respond to the assessed risks of material misstatement, the auditor may discover that the accounting estimate is more complex than originally contemplated, which may call into question the assessment of the risk of material misstatement (for example, the inherent risk may need to be re-assessed on the higher end of the spectrum of inherent risk due to the effect of complexity) and therefore the auditor may need to perform additional further audit procedures to obtain sufficient appropriate audit evidence.[62]

A138. With respect to accounting estimates that have not been recognized, a particular focus of the auditor's evaluation may be on whether the recognition criteria of the applicable financial reporting framework have in fact been met. When an accounting estimate has not been recognized, and the auditor concludes that this treatment is appropriate, some financial reporting frameworks may require disclosure of the circumstances in the notes to the financial statements.

Determining Whether the Accounting Estimates are Reasonable or Misstated (Ref: Para. 9, 35)

A139. In determining whether, based on the audit procedures performed and evidence obtained, management's point estimate and related disclosures are reasonable, or are misstated:

- When the audit evidence supports a range, the size of the range may be wide and, in some circumstances, may be multiples of materiality for the financial statements as a whole (see also paragraph A125). Although a wide range may be appropriate in the circumstances, it may indicate that it is important for the

[59] ISA (UK) 700 (Revised November 2019), paragraph 11.

[60] ISA (UK) 240 (Revised May 2021), paragraph 33(b).

[61] ISA (UK) 330 (Revised July 2017), paragraph A60.

[62] See also ISA (UK) 315 (Revised July 2020), paragraph 31.

auditor to reconsider whether sufficient appropriate audit evidence has been obtained regarding the reasonableness of the amounts within the range.

- The audit evidence may support a point estimate that differs from management's point estimate. In such circumstances, the difference between the auditor's point estimate and management's point estimate constitutes a misstatement.
- The audit evidence may support a range that does not include management's point estimate. In such circumstances, the misstatement is the difference between management's point estimate and the nearest point of the auditor's range.

A140. Paragraphs A110–A114 provide guidance to assist the auditor in evaluating management's selection of a point estimate and related disclosures to be included in the financial statements.

A141. When the auditor's further audit procedures include testing how management made the accounting estimate or developing an auditor's point estimate or range, the auditor is required to obtain sufficient appropriate audit evidence about disclosures that describe estimation uncertainty in accordance with paragraphs 26(b) and 29(b) and other disclosures in accordance with paragraph 31. The auditor then considers the audit evidence obtained about disclosures as part of the overall evaluation, in accordance with paragraph 35, of whether the accounting estimates and related disclosures are reasonable in the context of the applicable financial reporting framework, or are misstated.

A142. ISA (UK) 450 (Revised June 2016) also provides guidance regarding qualitative disclosures[63] and when misstatements in disclosures could be indicative of fraud.[64]

A143. When the financial statements are prepared in accordance with a fair presentation framework, the auditor's evaluation as to whether the financial statements achieve fair presentation[65] includes the consideration of the overall presentation, structure and content of the financial statements, and whether the financial statements, including the related notes, represent the transactions and events in a manner that achieves fair presentation. For example, when an accounting estimate is subject to a higher degree of estimation uncertainty, the auditor may determine that additional disclosures are necessary to achieve fair presentation. If management does not include such additional disclosures, the auditor may conclude that the financial statements are materially misstated.

A144. ISA (UK) 705 (Revised June 2016)[66] provides guidance on the implications for the auditor's opinion when the auditor believes that management's disclosures in the financial statements are inadequate or misleading, including, for example, with respect to estimation uncertainty.

Written Representations (Ref: Para. 37)

A145. Written representations about specific accounting estimates may include representations:

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63 ISA (UK) 450 (Revised June 2016), paragraph A17.

64 ISA (UK) 450 (Revised June 2016), paragraph A22.

65 ISA (UK) 700 (Revised November 2019), paragraph 14.

66 ISA (UK) 705 (Revised June 2016), paragraphs 22–23.

- That the significant judgments made in making the accounting estimates have taken into account all relevant information of which management is aware.
- About the consistency and appropriateness in the selection or application of the methods, assumptions and data used by management in making the accounting estimates.
- That the assumptions appropriately reflect management's intent and ability to carry out specific courses of action on behalf of the entity, when relevant to the accounting estimates and disclosures.
- That disclosures related to accounting estimates, including disclosures describing estimation uncertainty, are complete and are reasonable in the context of the applicable financial reporting framework.
- That appropriate specialized skills or expertise has been applied in making the accounting estimates.
- That no subsequent event requires adjustment to the accounting estimates and related disclosures included in the financial statements.
- When accounting estimates are not recognized or disclosed in the financial statements, about the appropriateness of management's decision that the recognition or disclosure criteria of the applicable financial reporting framework have not been met.

Communication with Those Charged With Governance, Management or Other Relevant Parties (Ref: Para. 38)

A146. In applying ISA (UK) 260 (Revised November 2019), the auditor communicates with those charged with governance the auditor's views about significant qualitative aspects of the entity's accounting practices relating to accounting estimates and related disclosures.[67] Appendix 2 includes matters specific to accounting estimates that the auditor may consider communicating to those charged with governance.

A147. ISA (UK) 265 requires the auditor to communicate in writing to those charged with governance significant deficiencies in internal control identified during the audit.[68] Such significant deficiencies may include those related to controls over:

(a) The selection and application of significant accounting policies, and the selection and application of methods, assumptions and data;

(b) Risk management and related systems;

(c) Data integrity, including when data is obtained from an external information source; and

(d) The use, development and validation of models, including models obtained from an external provider, and any adjustments that may be required.

A148. In addition to communicating with those charged with governance, the auditor may be permitted or required to communicate directly with regulators or prudential supervisors. Such communication may be useful throughout the audit or at particular stages, such as when planning the audit or when finalizing the auditor's report. For example, in some

[67] ISA (UK) 260 (Revised November 2019), paragraph 16(a).

[68] ISA (UK) 265, paragraph 9.

jurisdictions, financial institution regulators seek to cooperate with auditors to share information about the operation and application of controls over financial instrument activities, challenges in valuing financial instruments in inactive markets, expected credit losses, and insurance reserves while other regulators may seek to understand the auditor's views on significant aspects of the entity's operations including the entity's costs estimates. This communication may be helpful to the auditor in identifying, assessing and responding to risks of material misstatement.

Documentation (Ref: Para. 39)

A149. ISA (UK) 315 (Revised July 2020)[69] and ISA (UK) 330 (Revised July 2017)[70] provide requirements and guidance on documenting the auditor's understanding of the entity, risk assessments and responses to assessed risks. This guidance is based on the requirements and guidance in ISA (UK) 230 (Revised June 2016).[71] In the context of auditing accounting estimates, the auditor is required to prepare audit documentation about key elements of the auditor's understanding of the entity and its environment related to accounting estimates. In addition, the auditor's judgments about the assessed risks of material misstatement related to accounting estimates, and the auditor's responses, may likely be further supported by documentation of communications with those charged with governance and management.

A150. In documenting the linkage of the auditor's further audit procedures with the assessed risks of material misstatement at the assertion level, in accordance with ISA (UK) 330 (Revised July 2017), this ISA (UK) requires that the auditor take into account the reasons given to the risks of material misstatement at the assertion level. Those reasons may relate to one or more inherent risk factors or the auditor's assessment of control risk. However, the auditor is not required to document how every inherent risk factor was taken into account in identifying and assessing the risks of material misstatement in relation to each accounting estimate.

A151. The auditor also may consider documenting:

- When management's application of the method involves complex modeling, whether management's judgments have been applied consistently and, when applicable, that the design of the model meets the measurement objective of the applicable financial reporting framework.
- When the selection and application of methods, significant assumptions, or the data is affected by complexity to a higher degree, the auditor's judgments in determining whether specialized skills or knowledge are required to perform the risk assessment procedures, to design and perform procedures responsive to those risks, or to evaluate the audit evidence obtained. In these circumstances, the documentation also may include how the required skills or knowledge were applied.

A152. Paragraph A7 of ISA (UK) 230 (Revised June 2016) notes that, although there may be no single way in which the auditor's exercise of professional skepticism is documented, the audit documentation may nevertheless provide evidence of the auditor's exercise of professional skepticism. For example, in relation to accounting estimates, when the

69 ISA (UK) 315 (Revised July 2020), paragraphs 32 and A152–A155.

70 ISA (UK) 330 (Revised July 2017), paragraphs 28 and A63.

71 ISA (UK) 230 (Revised June 2016), paragraph 8(c).

audit evidence obtained includes evidence that both corroborates and contradicts management's assertions, the documentation may include how the auditor evaluated that evidence, including the professional judgments made in forming a conclusion as to the sufficiency and appropriateness of the audit evidence obtained. Examples of other requirements in this ISA (UK) for which documentation may provide evidence of the exercise of professional skepticism by the auditor include:

- Paragraph 13(d), regarding how the auditor has applied an understanding in developing the auditor's own expectation of the accounting estimates and related disclosures to be included in the entity's financial statements and how that expectation compares with the entity's financial statements prepared by management;
- Paragraph 18, which requires further audit procedures to be designed and performed to obtain sufficient appropriate evidence in a manner that is not biased toward obtaining audit evidence that may be corroborative or towards excluding audit evidence that may be contradictory;
- Paragraphs 23(b), 24(b), 25(b) and 32, which address indicators of possible management bias; and
- Paragraph 34, which addresses the auditor's consideration of all relevant audit evidence, whether corroborative or contradictory.

Appendix 1

(Ref: Para. 2, 4, 12(c), A8, A66)

Inherent Risk Factors

Introduction

1. In identifying, assessing and responding to the risks of material misstatement at the assertion level for an accounting estimate and related disclosures, this ISA (UK) requires the auditor to take into account the degree to which the accounting estimate is subject to estimation uncertainty, and the degree to which the selection and application of the methods, assumptions and data used in making the accounting estimate, and the selection of management's point estimate and related disclosures for inclusion in the financial statements, are affected by complexity, subjectivity or other inherent risk factors.

2. Inherent risk related to an accounting estimate is the susceptibility of an assertion about the accounting estimate to material misstatement, before consideration of controls. Inherent risk results from inherent risk factors, which give rise to challenges in appropriately making the accounting estimate. This Appendix provides further explanation about the nature of the inherent risk factors of estimation uncertainty, subjectivity and complexity, and their inter-relationships, in the context of making accounting estimates and selecting management's point estimate and related disclosures for inclusion in the financial statements.

Measurement Basis

3. The measurement basis and the nature, condition and circumstances of the financial statement item give rise to relevant valuation attributes. When the cost or price of the item cannot be directly observed, an accounting estimate is required to be made by applying an appropriate method and using appropriate data and assumptions. The method may be specified by the applicable financial reporting framework, or is selected by management, to reflect the available knowledge about how the relevant valuation attributes would be expected to influence the cost or price of the item on the measurement basis.

Estimation Uncertainty

4. Susceptibility to a lack of precision in measurement is often referred to in accounting frameworks as measurement uncertainty. Estimation uncertainty is defined in this ISA (UK) as susceptibility to an inherent lack of precision in measurement. It arises when the required monetary amount for a financial statement item that is recognized or disclosed in the financial statements cannot be measured with precision through direct observation of the cost or price. When direct observation is not possible, the next most precise alternative measurement strategy is to apply a method that reflects the available knowledge about cost or price for the item on the relevant measurement basis, using observable data about relevant valuation attributes.

5. However, constraints on the availability of such knowledge or data may limit the verifiability of such inputs to the measurement process and therefore limit the precision of measurement outcomes. Furthermore, most accounting frameworks acknowledge that there are practical constraints on the information that should be taken into account,

such as when the cost of obtaining it would exceed the benefits. The lack of precision in measurement arising from these constraints is inherent because it cannot be eliminated from the measurement process. Accordingly, such constraints are sources of estimation uncertainty. Other sources of measurement uncertainty that may occur in the measurement process are, at least in principle, capable of elimination if the method is applied appropriately and therefore are sources of potential misstatement rather than estimation uncertainty.

6. When estimation uncertainty relates to uncertain future inflows or outflows of economic benefits that will ultimately result from the underlying asset or liability, the outcome of these flows will only be observable after the date of the financial statements. Depending on the nature of the applicable measurement basis and on the nature, condition and circumstances of the financial statement item, this outcome may be directly observable before the financial statements are finalized or may only be directly observable at a later date. For some accounting estimates, there may be no directly observable outcome at all.

7. Some uncertain outcomes may be relatively easy to predict with a high level of precision for an individual item. For example, the useful life of a production machine may be easily predicted if sufficient technical information is available about its average useful life. When it is not possible to predict a future outcome, such as an individual's life expectancy based on actuarial assumptions, with reasonable precision, it may still be possible to predict that outcome for a group of individuals with greater precision. Measurement bases may, in some cases, indicate a portfolio level as the relevant unit of account for measurement purposes, which may reduce inherent estimation uncertainty.

Complexity

8. Complexity (i.e., the complexity inherent in the process of making an accounting estimate, before consideration of controls) gives rise to inherent risk. Inherent complexity may arise when:

    - There are many valuation attributes with many or non-linear relationships between them.
    - Determining appropriate values for one or more valuation attributes requires multiple data sets.
    - More assumptions are required in making the accounting estimate, or when there are correlations between the required assumptions.
    - The data used is inherently difficult to identify, capture, access or understand.

9. Complexity may be related to the complexity of the method and of the computational process or model used to apply it. For example, complexity in the model may reflect the need to apply probability-based valuation concepts or techniques, option pricing formulae or simulation techniques to predict uncertain future outcomes or hypothetical behaviors. Similarly, the computational process may require data from multiple sources, or multiple data sets to support the making of an assumption or the application of sophisticated mathematical or statistical concepts.

10. The greater the complexity, the more likely it is that management will need to apply specialized skills or knowledge in making an accounting estimate or engage a management's expert, for example in relation to:

- Valuation concepts and techniques that could be used in the context of the measurement basis and objectives or other requirements of the applicable financial reporting framework and how to apply those concepts or techniques;
- The underlying valuation attributes that may be relevant given the nature of the measurement basis and the nature, condition and circumstances of the financial statement items for which accounting estimates are being made; or
- Identifying appropriate sources of data from internal sources (including from sources outside the general or subsidiary ledgers) or from external information sources, determining how to address potential difficulties in obtaining data from such sources or in maintaining its integrity in applying the method, or understanding the relevance and reliability of that data.

11. Complexity relating to data may arise, for example, in the following circumstances:

(a) When data is difficult to obtain or when it relates to transactions that are not generally accessible. Even when such data is accessible, for example through an external information source, it may be difficult to consider the relevance and reliability of the data, unless the external information source discloses adequate information about the underlying data sources it has used and about any data processing that has been performed.

(b) When data reflecting an external information source's views about future conditions or events, which may be relevant in developing support for an assumption, is difficult to understand without transparency about the rationale and information taken into account in developing those views.

(c) When certain types of data are inherently difficult to understand because they require an understanding of technically complex business or legal concepts, such as may be required to properly understand data that comprises the terms of legal agreements about transactions involving complex financial instruments or insurance products.

Subjectivity

12. Subjectivity (i.e., the subjectivity inherent in the process of making an accounting estimate, before consideration of controls) reflects inherent limitations in the knowledge or data reasonably available about valuation attributes. When such limitations exist, the applicable financial reporting framework may reduce the degree of subjectivity by providing a required basis for making certain judgments. Such requirements may, for example, set explicit or implied objectives relating to measurement, disclosure, the unit of account, or the application of a cost constraint. The applicable financial reporting framework may also highlight the importance of such judgments through requirements for disclosures about those judgments.

13. Management judgment is generally needed in determining some or all of the following matters, which often involve subjectivity:

- To the extent not specified under the requirements of the applicable financial reporting framework, the appropriate valuation approaches, concepts, techniques and factors to use in the estimation method, having regard to available knowledge;
- To the extent valuation attributes are observable when there are various potential sources of data, the appropriate sources of data to use;

- To the extent valuation attributes are not observable, the appropriate assumptions or range of assumptions to make, having regard to the best available data, including, for example, market views;
- The range of reasonably possible outcomes from which to select management's point estimate, and the relative likelihood that certain points within that range would be consistent with the objectives of the measurement basis required by the applicable financial reporting framework; and
- The selection of management's point estimate, and the related disclosures to be made, in the financial statements.

14. Making assumptions about future events or conditions involves the use of judgment, the difficulty of which varies with the degree to which those events or conditions are uncertain. The precision with which it is possible to predict uncertain future events or conditions depends on the degree to which those events or conditions are determinable based on knowledge, including knowledge of past conditions, events and related outcomes. The lack of precision also contributes to estimation uncertainty, as described above.

15. With respect to future outcomes, assumptions will only need to be made for those features of the outcome that are uncertain. For example, in considering the measurement of a possible impairment of a receivable for a sale of goods at the balance sheet date, the amount of the receivable may be unequivocally established and directly observable in the related transaction documents. What may be uncertain is the amount, if any, for loss due to impairment. In this case, assumptions may only be required about the likelihood of loss and about the amount and timing of any such loss.

16. However, in other cases, the amounts of cash flows embodied in the rights relating to an asset may be uncertain. In those cases, assumptions may have to be made about both the amounts of the underlying rights to cash flows and about potential losses due to impairment.

17. It may be necessary for management to consider information about past conditions and events, together with current trends and expectations about future developments. Past conditions and events provide historical information that may highlight repeating historical patterns that can be extrapolated in evaluating future outcomes. Such historical information may also indicate changing patterns of such behavior over time (cycles or trends). These may suggest that the underlying historical patterns of behavior have been changing in somewhat predictable ways that may also be extrapolated in evaluating future outcomes. Other types of information may also be available that indicate possible changes in historical patterns of such behavior or in related cycles or trends. Difficult judgments may be needed about the predictive value of such information.

18. The extent and nature (including the degree of subjectivity involved) of the judgments taken in making the accounting estimates may create opportunity for management bias in making decisions about the course of action that, according to management, is appropriate in making the accounting estimate. When there is also a high level of complexity or a high level of estimation uncertainty, or both, the risk of, and opportunity for, management bias or fraud may also be increased.

Relationship of Estimation Uncertainty to Subjectivity and Complexity

19. Estimation uncertainty gives rise to inherent variation in the possible methods, data sources and assumptions that could be used to make an accounting estimate. This gives rise to subjectivity, and hence, the need for the use of judgment in making the accounting estimate. Such judgments are required in selecting the appropriate methods and data sources, in making the assumptions, and in selecting management's point estimate and related disclosures for inclusion in the financial statements. These judgments are made in the context of the recognition, measurement, presentation and disclosure requirements of the applicable financial reporting framework. However, because there are constraints on the availability and accessibility of knowledge or information to support these judgments, they are subjective in nature.

20. Subjectivity in such judgments creates the opportunity for unintentional or intentional management bias in making them. Many accounting frameworks require that information prepared for inclusion in the financial statements should be neutral (i.e., that it should not be biased). Given that bias can, at least in principle, be eliminated from the estimation process, sources of potential bias in the judgments made to address subjectivity are sources of potential misstatement rather than sources of estimation uncertainty.

21. The inherent variation in the possible methods, data sources and assumptions that could be used to make an accounting estimate (see paragraph 19) also gives rise to variation in the possible measurement outcomes. The size of the range of reasonably possible measurement outcomes results from the degree of estimation uncertainty and is often referred to as the sensitivity of the accounting estimate. In addition to determining measurement outcomes, an estimation process also involves analyzing the effect of inherent variations in the possible methods, data sources and assumptions on the range of reasonably possible measurement outcomes (referred to as sensitivity analysis).

22. Developing a financial statement presentation for an accounting estimate, which, when required by the applicable financial reporting framework, achieves faithful representation (i.e., complete, neutral and free from error) includes making appropriate judgments in selecting a management point estimate that is appropriately chosen from within the range of reasonably possible measurement outcomes and related disclosures that appropriately describe the estimation uncertainty. These judgments may themselves involve subjectivity, depending on the nature of the requirements in the applicable financial reporting framework that address these matters. For example, the applicable financial reporting framework may require a specific basis (such as a probability weighted average or a best estimate) for the selection of the management point estimate. Similarly, it may require specific disclosures or disclosures that meet specified disclosure objectives or additional disclosures that are required to achieve fair presentation in the circumstances.

23. Although an accounting estimate that is subject to a higher degree of estimation uncertainty may be less precisely measurable than one subject to a lower degree of estimation uncertainty, the accounting estimate may still have sufficient relevance for users of the financial statements to be recognized in the financial statements if, when required by the applicable financial reporting framework, a faithful representation of the item can be achieved. In some cases, estimation uncertainty may be so great that the recognition criteria in the applicable financial reporting framework are not met and the accounting estimate cannot be recognized in the financial statements. Even in

these circumstances, there may still be relevant disclosure requirements, for example to disclose the point estimate or range of reasonably possible measurement outcomes and information describing the estimation uncertainty and constraints in recognizing the item. The requirements of the applicable financial reporting framework that apply in these circumstances may be specified to a greater or lesser degree. Accordingly, in these circumstances, there may be additional judgments that involve subjectivity to be made.

Appendix 2

(Ref: Para. A146)

Communications with Those Charged with Governance

Matters that the auditor may consider communicating with those charged with governance with respect to the auditor's views about significant qualitative aspects of the entity's accounting practices related to accounting estimates and related disclosures include:

(a) How management identifies transactions, other events and conditions that may give rise to the need for, or changes in, accounting estimates and related disclosures.

(b) Risks of material misstatement.

(c) The relative materiality of the accounting estimates to the financial statements as a whole.

(d) Management's understanding (or lack thereof) regarding the nature and extent of, and the risks associated with, accounting estimates.

(e) Whether management has applied appropriate specialized skills or knowledge or engaged appropriate experts.

(f) The auditor's views about differences between the auditor's point estimate or range and management's point estimate.

(g) The auditor's views about the appropriateness of the selection of accounting policies related to accounting estimates and presentation of accounting estimates in the financial statements.

(h) Indicators of possible management bias.

(i) Whether there has been or ought to have been a change from the prior period in the methods for making the accounting estimates.

(j) When there has been a change from the prior period in the methods for making the accounting estimate, why, as well as the outcome of accounting estimates in prior periods.

(k) Whether management's methods for making the accounting estimates, including when management has used a model, are appropriate in the context of the measurement objectives, the nature, conditions and circumstances, and other requirements of the applicable financial reporting framework.

(l) The nature and consequences of significant assumptions used in accounting estimates and the degree of subjectivity involved in the development of the assumptions.

(m) Whether significant assumptions are consistent with each other and with those used in other accounting estimates, or with assumptions used in other areas of the entity's business activities.

(n) When relevant to the appropriateness of the significant assumptions or the appropriate application of the applicable financial reporting framework, whether management has the intent to carry out specific courses of action and has the ability to do so.

(o) How management has considered alternative assumptions or outcomes and why it has rejected them, or how management has otherwise addressed estimation uncertainty in making the accounting estimate.

(p) Whether the data and significant assumptions used by management in making the accounting estimates are appropriate in the context of the applicable financial reporting framework.

(q) The relevance and reliability of information obtained from an external information source.

(r) Significant difficulties encountered when obtaining sufficient appropriate audit evidence relating to data obtained from an external information source or valuations performed by management or a management's expert.

(s) Significant differences in judgments between the auditor and management or a management's expert regarding valuations.

(t) The potential effects on the entity's financial statements of material risks and exposures required to be disclosed in the financial statements, including the estimation uncertainty associated with accounting estimates.

(u) The reasonableness of disclosures about estimation uncertainty in the financial statements.

(v) Whether management's decisions relating to the recognition, measurement, presentation and disclosure of the accounting estimates and related disclosures in the financial statements are in accordance with the applicable financial reporting framework.



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