Draft of Proposed ISA 540 (Revised) – Marked from March 2018 IAASB Meeting/ April 2018 Teleconference

> **Note: The standard is marked up from Agenda item 2-C UPDATED that was discussed with the Board on Friday March 16, except for the paragraphs presented to the Board for the April 24 teleconference. These paragraphs are tracked from Agenda Item 1 that was discussed in the teleconference and are highlighted in grey.**

INTERNATIONAL STANDARD ON AUDITING 540 (REVISED)

AUDITING ACCOUNTING ESTIMATES AND RELATED DISCLOSURES

Introduction

Scope of this ISA

1. This International Standard on Auditing (ISA) 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 315 (Revised),[1] ISA 330,[2] ISA 450,[3] ISA 500[4] and other relevant ISAs are to be applied in relation to accounting estimates. It also includes requirements and guidance on the evaluation of misstatements of accounting estimates and related disclosures, and indicators of possible management bias. [Previously paragraph 1]

Nature of Accounting Estimates

~~2. Many monetary amounts for financial statement items are susceptible to an inherent lack of precision in their measurement, which is referred to as estimation uncertainty. In the ISAs, such monetary amounts are referred to as accounting estimates. (Ref: Para. A1)~~

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 ~~process~~ of these monetary amounts is subject to estimation uncertainty, ~~that~~ which reflects inherent limitations in ~~available~~ knowledge or data. These limitations ~~These limitations lead to the need for judgment in selecting and applying the method used and~~ give rise to inherent subjectivity and ~~the need to make assumptions. The need to make assumptions results in inherent~~ variations in the measurement outcome~~ of the measurement process~~s. 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. ~~Other variations in the measurement process, which are not due to estimation uncertainty and could result in a misstatement of the accounting estimate, also may arise when the process is affected~~The effects ~~by~~ of ~~subjectivity,~~ complexity, subjectivity ~~and~~ or other inherent risk factors on the measurement

[1] ISA 315 (Revised), *Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and Its Environment*

[2] ISA 330, *The Auditor's Responses to Assessed Risks*

[3] ISA 450, *Evaluation of Misstatements Identified during the Audit*

[4] ISA 500, *Audit Evidence*

of these monetary amounts also affects their susceptibility to misstatement. (Ref: Para. A1–A6, Appendix 1) [Previously paragraph 2A]

Key Concepts of This ISA

3. This ISA requires a separate assessment of inherent risk for purposes of assessing the risks of material misstatement at the assertion level for accounting estimates. Depending on the nature of a particular accounting estimate, the susceptibility of an assertion to a misstatement that could be material may be subject to or affected by estimation uncertainty, complexity, subjectivity or other inherent risk factors, and the interrelationship among them. As explained in ISA 200,[5] inherent risk is higher for some assertions and related classes of transactions, account balances and disclosures than for others. Accordingly, the ~~level~~ 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 ~~from lower to higher. For purposes of this ISA, this scale~~that is referred to in this ISA as the spectrum of inherent risk. ~~The auditor's separate assessment of inherent risk depends on where the level of inherent risk falls on the spectrum.~~ (Ref: Para. A7-A8, A63-A64, Appendix 1) [Previously paragraph 3A]

4. ~~This ISA also requires a separate assessment of control risk for accounting estimates. It~~ This ISA refers to relevant requirements in ISA 315 (Revised) and ISA 330,[6] 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 relevant to the audit, for which the auditor is required ~~and, accordingly, whether~~ to evaluate their design and determine whether they have been implemented.
   - To test the operating effectiveness of relevant controls. ~~(Ref: Para. A9)~~ [Previously paragraph 4]

5. This ISA also requires a separate assessment of control risk for accounting estimates. In assessing control risk at the assertion level, 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 perform tests of controls, the auditor's assessment of the risk of material misstatement at the assertion level cannot be reduced for the effective operation of relevant controls with respect to the particular assertion.[7] (Ref: Para. A9)

6. This ISA emphasizes that the auditor's further audit procedures (including, where appropriate, tests of controls) need to be responsive to the assessed risks of material misstatement at the assertion level, taking into account the effect of one or more inherent risk factors. When the auditor plans to rely on controls, such reasons may relate to a combination of inherent and~~considering the reasons for the assessment given to such risks. Those reasons may relate to the effect of one or more inherent risk factors on the auditor's assessment of inherent risk, or to the auditor's assessment of~~ control risk. [Previously paragraph 4A]

7. The exercise of professional skepticism by the auditor is important to the auditor's work relating to accounting estimates because of susceptibility to misstatement due to management bias or ~~to~~

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5 ISA 200, *Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing*, paragraph A40

~~6 ISA 330, *The Auditor's Responses to Assessed Risks*~~

7 ISA 530, *Audit Sampling*, Appendix 3

~~misstatement due to~~ fraud in making accounting estimates due to their subjective, potentially complex and uncertain nature. [Previously paragraph 5]

8. This ISA 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[8] in the context of the applicable financial reporting framework, or are misstated. For purposes of this ISA, 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. A10–A11)

- The making of the accounting estimate, including the selection of the method, assumptions and data from ~~available~~ alternatives in view of the nature of the accounting estimate and the facts and circumstances of the entity;
- The selection of ~~an appropriate~~ 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. [Previously paragraph 6]

Effective Date

9. This ISA is effective for audits of financial statements for periods beginning ~~ending~~ on or after December 15, 201X~~9~~. [Previously paragraph 7]

Objective

10. 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. [Previously paragraph 8]

Definitions

11. For purposes of the ISAs, the following terms have the meanings attributed below:

(a) Accounting estimate – A monetary amount for which the measurement, ~~, the measurement of which~~ in accordance with the requirements of the applicable financial reporting framework, is subject to estimation uncertainty. (Ref: Para. A12)

(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. A13)

(c) Estimation uncertainty – Susceptibility to an inherent lack of precision in measurement. (Ref: Para. A14, Appendix ~~2~~1)

(d) Management bias – A lack of neutrality by management in the preparation of information. (Ref: Para. A15)

(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. A16) [Previously paragraph 9]

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8 See also ISA 700 (Revised), *Forming an Opinion and Reporting on Financial Statements*, paragraph 13(c)~~.~~

Requirements

Risk Assessment Procedures and Related Activities

12. When obtaining an understanding of the entity and its environment, including the entity's internal control, as required by ISA 315 (Revised),[9] the auditor shall perform risk assessment procedures to the extent necessary to obtain an understanding of the following matters related to the entity's accounting estimates~~. The auditor's understanding of these matters depends on whether the individual matter(s) apply in the circumstances, and the extent to which such an understanding is necessary~~ to provide an appropriate basis for the identification and assessment of risks of material misstatement at the financial statement and assertion levels. (Ref: Para. A17–A20)

The Entity and Its Environment

(a) The entity's transactions and other events and 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. A21)

(b) The requirements of the applicable financial reporting framework, including the recognition criteria, measurement bases, and the related presentation and disclosure requirements. (Ref: Para. A22–A23)

(c) Regulatory factors relevant to the entity's accounting estimates. (Ref: Para. A24)

(d) The nature of the accounting estimates and related disclosures that the auditor ~~would~~ expects to be included in the entity's financial statements, based on the auditor's understanding of the matters in 10(a)–(c) above. (Ref: Para. A25)

The Entity's Internal Control Relevant to the Audit

(e) The nature and extent of oversight and governance that the entity has in place over management's process for making accounting estimates. (Ref: Para. A26–A28).

(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. A29-A30)

(g) How the entity's risk assessment process identifies and addresses risks relating to accounting estimates to assist the auditor in understanding the effects of the inherent risk factors, including with respect to estimation uncertainty and ~~the~~ susceptibility to misstatement due to management bias or fraud. (Ref: Para. A31–A32)

(h) The entity's information system relating to accounting estimates, including ~~how management~~: (Ref: Para. A33)

(i) ~~Identifies~~The classes of transactions, ~~and~~ or events and conditions other than transactions, that are significant to the financial statements~~,~~ and that give rise to the need for, or changes in, accounting estimates and related disclosures; and (Ref: Para. A34)

(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

[9] ISA 315 (Revised), paragraphs 3, 5–6, 9, 11–12, 15-17, and 20-21

financial reporting framework, including how management: (Ref: Para. A35–A36)

(i) Selects or designs, and applies, the methods used, including the use of models; (Ref: Para. A37–A38)

(ii) Selects the assumptions to be used, including consideration of alternatives, and identifies significant assumptions; (Ref: Para. A39–A42); and

(iii) Selects the data to be used; (Ref: Para. A43)

b.~~(iii)~~ Understands the degree of estimation uncertainty~~ associated with accounting estimates~~, including through considering the range of possible measurement outcomes; and (Ref: Para. A44)

c.~~(iv)~~ Selects a point estimate and related disclosures for inclusion in the financial statements. (Ref: Para.A45–A48)

(i) Control activities relevant to the audit over management's process for making accounting estimates (see paragraph 12(h)(ii)). (Ref: Para. A49–A53)

(j) How management reviews the outcome(s) of previous accounting estimates and responds to the results of that review. [Previously paragraph 10]

13. 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. A54–A59) [Previously paragraph 11]

14. With respect to accounting estimates, t~~T~~he auditor shall determine whether the engagement team requires specialized skills or knowledge ~~are required~~ 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. A60–A62) [Previously paragraph 12]

Identifying and Assessing the Risks of Material Misstatement

15. In identifying and assessing the risks of material misstatement relating to an accounting estimate and related disclosures at the assertion level, as required by ISA 315 (Revised),[10] the auditor shall separately assess inherent risk and control risk, taking the following into account in making the assessment of inherent risk: (Ref: Para. A63–A70)

(a) The degree to which the accounting estimate is subject to estimation uncertainty; and (Ref: Para. A71–A73)

(b) The degree to which the following are affected by complexity, subjectivity, or other inherent risk factors: (Ref: Para. A74–A77)

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

[10] ISA 315 (Revised), paragraph 25 and 26

(ii) The selection of management's point estimate and related disclosures for inclusion in the financial statements. [Previously paragraph 13]

16. The auditor shall determine whether any of the risks of material misstatement identified and assessed in accordance with paragraph 15 are, in the auditor's judgment, a significant risk.[11] If the auditor has determined that a significant risk exists, the auditor shall obtain an understanding of the entity's controls, including control activities, relevant to that risk.[12] (Ref: Para. A78-A80) [Previously paragraph 13A]

Responses to the Assessed Risks of Material Misstatement

17. As required by ISA 330,[13] the auditor's further audit procedures shall be responsive to the assessed risks of material misstatement[14] at the assertion level, 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) ~~Determining whether~~Considering events occurring up to the date of the auditor's report ~~provide audit evidence regarding the accounting estimate~~ (see paragraph 20);

(b) Testing how management made the accounting estimate ~~and related disclosures about estimation uncertainty~~ (see paragraphs 21-26); or

(c) Developing an auditor's point estimate or range ~~based on available audit evidence to evaluate management's point estimate and related disclosures about estimation uncertainty~~ (see paragraphs 27-28).

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 the further audit procedures to obtain sufficient appropriate audit evidence in a manner that is neither~~not~~ biased towards ~~only~~ obtaining audit evidence that ~~is~~ may be~~likely to be~~ corroborative nor biased towards ~~and that exclud~~not obtaining audit evidence that may be contradictory~~ in nature~~. (Ref: Para. A81–A84) [Previously paragraph 15]

18. As required by ISA 330,[16] the auditor shall design and perform tests of ~~relevant~~ controls to obtain sufficient appropriate audit evidence as to the~~ir~~ operating effectiveness of relevant 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 ~~to respond to those risks~~ at the assertion level.

The auditor's tests of such~~relevant~~ controls shall be responsive to the reasons for the assessment given to the risks of material misstatement. The auditor also shall take into account that the greater the reliance the auditor places on the effectiveness of a control, the more persuasive the audit evidence needs to be.[17] (Ref: Para. A85–A89) [Previously paragraph 16]

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[11] ISA 315 (Revised), paragraph 27

[12] ISA 315 (Revised), paragraph 29

[13] ISA 330, ~~*The Auditor's Responses to Assessed Risks,*~~ paragraphs 6-15 and 18

[14] ISA 330, paragraphs 6-7 and 21

[15] ISA 330, paragraph 7(b)

~~[16] ISA 330, paragraph 8~~

[17] ISA 330, paragraph 9

19. For a significant risk relating to an accounting estimate, the auditor's further audit procedures shall include tests of ~~relevant~~ controls in the current period if the auditor plans to rely on those controls. ~~In addition, the auditor shall perform substantive procedures that are responsive to the reasons for that risk, and, w~~When the approach to a significant risk consists only of substantive procedures, those procedures shall include tests of details.[18] [Previously paragraph 16A]

~~Determining Whether~~Considering Events Occurring up to the Date of the Auditor's Report ~~Provide Audit Evidence Regarding the Accounting Estimate~~

20. When the auditor's further audit procedures include considering ~~obtaining audit evidence about~~ events occurring up to the date of the auditor's report, the auditor shall consider ~~evaluate~~ whether the audit evidence obtained through performing those procedures: (Ref: Para. A90–A93)

 (a) Corroborates or contradicts relevant assertions relating to the accounting estimate; and

 (b~~a~~) I~~i~~s sufficient and appropriate to address the risks of material misstatement at the assertion level,~~; and~~

 ~~(b) supports or contradicts relevant assertions 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. [Previously paragraph 17]

Testing How Management Made the Accounting Estimate

21. When testing ~~he auditor's further audit procedures include testing~~ how management made the accounting estimate, ~~the nature, timing, and extent of~~ the auditor ~~ose further audit procedures~~ shall include further audit procedures~~,be~~ designed and performed~~,~~ in accordance with paragraphs 22 to 26, to obtain sufficient appropriate audit evidence to address the risks of material misstatement relating to~~about~~: (Ref: Para. A94)

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

 (b) How management selected the point estimate and developed related disclosures about estimation uncertainty ~~to be included in the financial statements~~. [Previously paragraph 17A]

Methods

22. With respect to methods, the auditor's further audit procedures shall address~~obtain sufficient appropriate audit evidence about~~:

 (a) Whether the method selected i~~:~~

 ~~I~~s appropriate in the context of the applicable financial reporting framework, and, if applicable, changes from the method used in prior periods ~~methods~~ are appropriate; (Ref: Para. A95-A97)

 (b) Whether judgments made in selecting the method g~~G~~ive~~s~~ rise to indicators of possible management bias; (Ref: Para. ~~A107A~~A98)

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

18 ISA 330, paragraphs 15 and 21

(d~~c~~) When management's application of the method involves complex modelling, whether judgments have been applied consistently and whether, when applicable: (Ref: Para. A99–A101)

(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~~d~~) Whether the integrity of the significant assumptions and ~~significant~~ data has been maintained in applying the method. (Ref: Para. A102) [Previously paragraph 17B]

Significant Assumptions

23. With respect to significant assumptions, the auditor's further audit procedures shall address~~obtain sufficient appropriate audit evidence about~~:

(a) Whether the significant assumptions~~:~~

~~(i)~~ ~~A~~ are appropriate in the context of the ~~requirements of the~~ applicable financial reporting framework, and, if applicable, changes from prior periods are appropriate; (Ref: Para. A97, A103-A104)~~and~~

(b~~ii~~) Whether judgments made in selecting the significant assumptions ~~G~~give rise to indicators of possible management bias; and (Ref: Para. A98)

(c~~iii~~) Whether the significant assumptions a~~A~~re 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 ~~to the extent such assumptions are known to~~ the audit~~or~~; and (Ref: Para. A105)

(d~~b~~) When applicable, w~~W~~hether management has the intent to carry out specific courses of action and has the ability to do so~~, when such intent and ability are relevant to obtaining sufficient and appropriate audit evidence about the significant assumptions or the appropriate application of the requirements of the applicable financial reporting framework,~~. (Ref: Para. A106) [Previously paragraph 17C]

Data

24. With respect to data, the auditor's further audit procedures shall address:~~obtain sufficient appropriate audit evidence about~~

(a) W~~hen the data selected for use is significant), w~~hether such data ~~: (Ref: Para. A35)~~

~~(i)~~ ~~I~~is appropriate in the context ~~of the requirements~~ of the applicable financial reporting framework, and, if applicable, changes from prior periods are appropriate (Ref: Para. A97, A107);

(b~~ii~~) Whether judgments made in selecting the data g~~G~~ive~~s~~ rise to indicators of possible management bias; and (Ref: Para. A98)

(c~~iii~~) Whether such data i~~I~~s relevant and reliable in the circumstances; and (Ref: Para. A108)

(d~~b~~) Whether data ~~that is significant~~ has been appropriately understood or interpreted by management, including with respect to contractual terms. (Ref: Para. A109) [Previously paragraph 17D]

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

25. The auditor's further audit procedures shall address~~obtain sufficient appropriate audit evidence about~~ whether, in the context of the applicable financial reporting framework:

    (a) Management has taken appropriate steps to understand and address the estimation uncertainty, and to develop a point estimate that meets the measurement objective; and (Ref: Para. A110)

    (b) Management's point estimate and the related disclosures about ~~in the financial statements that describe the~~ estimation uncertainty are reasonable. (Ref: Para. A111–A115) [Previously paragraph 17E]

26. When, in the auditor's judgment based on the audit evidence obtained, management has not taken appropriate steps to ~~appropriately~~ understand and address the estimation uncertainty, the auditor shall:

    (a) Request management to consider alternative assumptions or perform sensitivity analyses, or provide additional disclosures relating to the estimation uncertainty, and evaluate management's response in accordance with paragraph 25;

    (b) If the auditor~~'s~~ determines, based on management's response to the auditor's request, ~~the auditor determines~~ that management still has not taken appropriate steps to understand and address the estimation uncertainty, to the extent possible, develop an auditor's point estimate or range to enable the auditor to evaluate the reasonableness of management's point estimate and the related disclosures ~~in the financial statements that describe the~~about estimation uncertainty; and (Ref: Para. A116–A117)

    (c) Evaluate whether a deficiency in internal control exists and, if so, communicate in accordance with ISA 265.[19] [Previously paragraph 17F]

Developing an Auditor's Point Estimate or Range ~~Based on Available Audit Evidence to Evaluate Management's Point Estimate and Related Disclosures about Estimation Uncertainty~~

27. When the auditor~~'s further audit procedures include developing~~ develops a point estimate or range to evaluate management's point estimate and related disclosures about estimation uncertainty~~, the auditor shall take into account the requirements of the applicable financial reporting framework and the auditor's understanding of the process used by management to make the accounting estimate.~~, ~~: (Ref: Para. A126C–A132)~~

~~(a) If the auditor's point estimate or range is developed using some or all of the auditor's own methods, assumptions or data, the auditor shall obtain sufficient appropriate audit evidence to enable~~ the auditor shall include further audit procedures to evaluate whether the methods, assumptions or data used are appropriate in the context of the applicable financial reporting framework. Regardless of whether ~~, including with respect to the matters in paragraphs 17B-17D, as applicable.~~

~~(b) When~~ the auditor uses management's or the auditor's own methods, assumptions or data, ~~the auditor shall obtain sufficient appropriate audit evidence in accordance with~~these further audit procedures shall be designed and performed to address the matters in paragraphs 22-24 ~~to evaluate whether management's methods, assumptions or data are appropriate~~. (Ref: Para.

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

A118–A123) [Previously paragraph 18]

28. 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~~ obtain sufficient appropriate audit evidence to address the risks of material misstatement relating to~~about whether management's point estimate and~~ the disclosures in the financial statements that describe the estimation uncertainty ~~are reasonable in the context of the applicable financial reporting framework~~. [Previously paragraph 18C]

Other Considerations Relating to Audit Evidence

29. Regardless of whether the audit evidence obtained in performing the procedures in paragraphs 20-28 relates to information that is ~~When information~~ produced by the entity, obtained from an external information source, ~~or~~ prepared using the work of a management's expert or independently obtained by the auditor ~~is to be used as audit evidence~~, the auditor also shall ~~also~~ comply with the relevant requirements in ISA 500.[20] (Ref: Para. A126–A129) [Previously paragraph 19A]

Disclosures Related to Accounting Estimates

30. The auditor's further audit procedures shall address~~obtain sufficient appropriate audit evidence about~~ whether the disclosures related to an accounting estimate~~, other than disclosures relating to estimation uncertainty,~~ are reasonable in the context of the ~~requirements of the~~ applicable financial reporting framework. (Ref: Para. A130) [Previously paragraph 21]

Indicators of Possible Management Bias

31. 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~~e~~ possible management bias. When indicators of possible management bias are identified, the auditor shall evaluate the implications for the audit. When bias in making an accounting estimate is intentional, it is fraudulent in nature. (Ref: Para. A131–A134) [Previously paragraph 21A]

Overall Evaluation Based on Audit Procedures Performed

32~~22~~. In applying ISA 330[21] to each accounting estimate, the auditor shall evaluate, based on the audit procedures performed and audit evidence obtained, whether: (Ref: Para A135-A137)

(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;

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[20] ISA 500, ~~*Audit Evidence*,~~ paragraphs 7 and 8

[21] ISA 330, paragraphs 25 and 26

(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. [Previously paragraph 22]

33. In making the evaluation required by paragraph 32(c), the auditor shall take into account all relevant audit evidence obtained, whether corroborative or contradictory.[22] 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 705 (Revised).[23] [Previously paragraph 22A]

Determining Whether the Accounting Estimates are Reasonable or Misstated

34. For ~~each accounting estimate~~each class of transactions, account balance or disclosure that includes an accounting estimate, the auditor shall ~~evaluate~~ determine whether the accounting estimates and related disclosures are reasonable in the context of the applicable financial reporting framework, or are misstated. In addition, the auditor shall evaluate: (Ref: Para. A10–A11)

(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 whole; 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.

ISA 450[24] provides guidance on distinguishing misstatements (whether factual, judgmental, or projected) ~~for purposes~~for ~~of~~ the auditor's evaluation of the effect of uncorrected misstatements on the financial statements. (Ref: Para. A138–A143) [Previously paragraph 23]

Written Representations

35. The auditor shall obtain written representations from management and, when appropriate, those charged with governance about whether the methods, significant assumptions, and 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. A144) [Previously paragraph 25]

Communication with Those Charged With Governance or Management

36. In applying ISA 260 (Revised)[25] and ISA 265,[26] 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 ~~significant~~ accounting estimates and take into account whether the reasons given to the risks of

[22] ISA 500, ~~*Audit Evidence*,~~ paragraph 11

[23] ISA 705 (Revised), *Modifications to the Opinion in the Independent Auditor's Report*

[24] ISA 450, ~~*Evaluation of Misstatements Identified during the Audit*,~~ paragraph A6

[25] ISA 260 (Revised), *Communication with Those Charged with Governance*, paragraph 16(a)

[26] ISA 265, paragraph 9

material misstatement relate to estimation uncertainty, or the effects of complexity, subjectivity or other inherent risk factors in making accounting estimates and related disclosures. (Ref: Para. A145–A147) [Previously paragraph 26]

Documentation

37. The auditor shall include in the audit documentation ~~relating to accounting estimates shall include~~:[27] (Ref: Para. A148–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~~, as required by paragraph 10~~; ~~and~~

(b) The linkage of the auditor's further audit procedures with the assessed risks of material misstatement at the assertion level,[28] taking into account the reasons (whether related to inherent risk or control risk) given to the assessment of those risks;

~~basis for significant professional judgments made, including:~~

~~(i) For risks of material misstatement relating to accounting estimates for which inherent risk is assessed as higher on the spectrum of inherent risk, including significant risks, how the auditor's further audit procedures are responsive to the assessed risks of material misstatement at the assertion level, considering the reasons for the assessment given to those risks, as required by paragraph 15;~~

(~~ii~~c) The auditor's response when management has not taken appropriate steps to understand and address estimation uncertainty~~, as required by paragraph 17F~~;

(~~iii~~d) Indicators of possible management bias related to accounting estimates, if any, and the auditor's evaluation of the implications for the audit~~The auditor's evaluation of the implications for the audit when indicators of possible management bias are identified, as required by paragraph 21A~~; and

(~~iv~~e) Significant professional judgments[29] relating to ~~The~~ the auditor's determination~~evaluation~~ of whether ~~the reasonableness of~~ the accounting estimates and related disclosures are reasonable in the context of the applicable financial reporting framework, or are misstated~~as required by paragraph 23~~. [Previously paragraph 27]

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Application and Other Explanatory Material

Nature of Accounting Estimates (Ref: Para. 2)

Examples of Accounting Estimates ~~(Ref: Para. 2)~~

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

- Inventory obsolescence.

[27] ISA 230, *Audit Documentation*, paragraphs 8, A6, A7 and A10

[28] ISA 330, paragraph 28(b)

[29] ISA 230, paragraphs 8(c) and A8

- 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. [Previously paragraph A1]

~~*Nature of Accounting Estimates* (Ref: Para. 2-2A)~~

~~A1a. The nature, condition and circumstances of financial statement items vary widely and give rise to quantitative and qualitative attributes of those items. These attributes (referred to in this ISA as valuation attributes) influence an item's cost or price, and therefore the monetary amount of the item, on the relevant measurement basis.~~

~~A1b. The nature of a financial statement item may give rise to valuation attributes relating to the rights, obligations or other claims relating to resources, or changes therein, which the item embodies. The circumstances and condition of a financial statement item also may give rise to valuation attributes. Valuation attributes also may affect how the item contributes to the timing and amounts of cash flows, and related risks and uncertainties, and may reflect other risks and uncertainties inherent in the item.~~

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~~ a model, ~~is a computational tool used to make an accounting estimate~~ by applying assumptions and data~~,~~ and a set of relationships between them~~, as specified by the method~~. [Previously paragraph A1A]

Assumptions and Data

A3. Assumptions involve judgments based on the latest~~best~~ 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 ~~possible~~ 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. [Previously paragraph A1D]

A4. For purposes of this ISA, 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 ~~do not involve~~therefore less need for management judgment. Otherwise, such information is an assumption. [Previously paragraph A1E]

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). [Previously paragraph A1F]

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. [Previously paragraph A1G]

Key Concepts of This ISA

Inherent Risk Factors (Ref: Para. 3)

A7. Inherent risk factors are characteristics of conditions and events that may affect the susceptibility of an assertion to misstatement, before consideration of controls. ~~This ISA focuses on the inherent risk factors of estimation uncertainty, subjectivity and complexity, but recognizes that other inherent risk factors also may exist.~~ 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. [Previously paragraph A1P]

A8. In addition to the inherent risk factors of estimation uncertainty, complexity or subjectivity, this ISA recognizes that other inherent risk factors also may exist in relation to accounting estimates. Other inherent risk factors that the auditor may consider in identifying and assessing the risks of material misstatement may include the extent to which the accounting estimate is subject to, or affected by:

- 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; and
- Susceptibility to misstatement due to management bias or ~~to misstatement due to~~ fraud in making the accounting estimate. [Previously paragraph A1Q]

Control Risk (Ref: Para. 5)

[A1R moved to paragraph 5]

A9. An important consideration for the auditor in assessing~~the assessment of the risks of material misstatement~~control risk at the assertion level is the ~~level of the~~ effectiveness of the design of the control~~ activities~~ s that the auditor intends to rely on and the extent to which the controls address the assessed inherent risks at the assertion level~~relied upon to determine the control risk, as this affects the substantive procedures to be performed~~. When the auditor intends to test the operating effectiveness of controls (based on the evaluation of their design and implementation), the auditor takes into account the expectation of the operating effectiveness of the controls when assessing control risk~~For example, when the design effectiveness of the controls relied upon is high, the auditor may perform fewer substantive procedures~~. The extent to which the design of these controls that the auditor intends to rely on address the assessed inherent risks will also likely affect the nature, timing or extent of substantive procedures to be performed. [Previously paragraph A1S]

Concept of "Reasonable" (Ref: Para. 6, 34)

A10. 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. [Previously paragraph A2]

A11. The term "applied appropriately" as used in paragraph 6 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. [Previously paragraph A3]

Definitions

Accounting Estimate (Ref: Para. 11(a))

A12. 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 ~~estimates of~~ monetary amounts included in disclosures or used to make judgments about ~~whether or not to recognize~~recognition or ~~disclose~~ disclosure ~~for~~relating to a class of transactions or account balance. [Previously paragraph A4]

Auditor's Point Estimate or Auditor's Range (Ref: Para. 11(b))

A13. 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 ~~or significant data~~ 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). [Previously paragraph A5]

Estimation Uncertainty (Ref: Para. 11(c))

A14. 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. [Previously paragraph A6]

Management Bias (Ref: Para. 11(d))

A15. 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. [Previously paragraph A7]

Outcome of an Accounting Estimate (Ref: Para. 11(f))

A16. 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. 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. [Previously paragraph A8]

Risk Assessment Procedures and Related Activities

Obtaining an Understanding of the Entity and Its Environment (Ref: Para. 12)

~~Scalability~~

A17. Paragraphs 11–24 of ISA 315 (Revised) require the auditor to obtain an understanding of certain matters about the entity and its environment, including the entity's internal control. The requirements in paragraph 10 of this ISA relate more specifically to accounting estimates and build on the broader requirements in ISA 315 (Revised). [Previously paragraph A8AA]

Scalability

A18. The extent of the risk assessment procedures related to the entity's accounting estimates may depend, to a greater or lesser degree, on whether the individual matter(s) apply in the circumstances~~, and the extent to which such an understanding is important given the nature of the entity~~. For example, the entity may have few transactions or other events and considerations 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 processes for making the accounting estimates may be less complex. In these circumstances, the accounting estimates may be subject to or affected by ~~less subject to~~ estimation uncertainty, ~~, be affected to a lesser degree by subjectivity,~~ complexity, subjectivity, or other inherent risk factors~~,~~ to a lesser degree and there may be fewer controls relevant to the audit. ~~In such circumstances, the auditor's understanding may be obtained primarily through inquiries of management with appropriate responsibilities for the financial statements and walk-throughs of management's process to prepare the accounting estimate as part of obtaining an understanding of the information system. Consequently~~If so, the auditor's risk assessment procedures ~~to understand the matters in paragraphs 12(e)–(i)~~ are likely to be less extensive and may be ~~In such circumstances, the auditor's understanding may be~~ obtained primarily through inquiries of management with appropriate responsibilities for the financial statements and walk-throughs of management's process ~~to prepare~~for making the accounting estimate~~ as part of obtaining an understanding of the information system.~~. [Previously paragraph A8A]

A19. By contrast, the accounting estimates may require significant judgments by management, and the processes 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 ~~more~~ subject to or affected by estimation uncertainty~~, and be affected to a greater degree by~~ subjectivity, complexity or other inherent risk factors to a greater degree. If so, the auditor's risk assessment procedures ~~to understand the matters in paragraphs 10(e)–(i)~~ are likely to be more extensive than in the circumstances in paragraph A18. [Previously paragraph A8B]

A20. 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~~and~~ the required estimates may have a lesser degree of estimation uncertainty.
- Accounting estimates may be generated outside the general ledger, controls over their development may be limited, and an owner-manager may have significant influence over the 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. [Previously paragraph A10]

The Entity and Its Environment

The entity's transactions~~,~~ and other events and ~~other~~ conditions (Ref: Para. 12(a))

A21. ~~Inquiries of management about C~~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
- ~~Accounting policies relating to accounting estimates have changed, as a result of changes to the requirements of the applicable financial reporting framework.~~
- ~~Regulatory or other changes outside the control of management have occurred that may require management to revise, or make new, accounting estimates.~~
- New events ~~conditions~~ or conditions~~events~~ have occurred~~ that may give rise to the need for new or revised accounting estimates~~.

~~The auditor may become aware of transactions and other events and conditions from obtaining an understanding of the entity and its environment (including from the auditor's previous experience with the entity and from audit procedures performed in previous audits), the requirements of the applicable financial reporting framework, and regulatory factors.~~ [Previously paragraph A25B]

The requirements of the applicable financial reporting framework (Ref: Para. 12(b))

A22. 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 those requirements 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.[30] [Previously paragraph A11]

A23. In obtaining this understanding, the auditor may seek to understand whether ~~the applicable financial reporting framework~~:

- ~~(a)~~ The applicable financial reporting framework:
    - o Prescribes certain criteria for the recognition, or methods for the measurement of accounting estimates;
    - o ~~(b)~~ 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 ~~and~~
    - o ~~(c)~~ 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 would require changes ~~in~~to the entity's accounting policies relating to accounting estimates. [Previously paragraph A11A]

Regulatory factors (Ref: Para. 12(c))

A24. Obtaining an understanding of regulatory factors, if any, that are relevant to accounting estimates (for example, regulation established by banking and insurance regulators) may assist the auditor in identifying applicable regulatory frameworks 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

30 ISA 260 (Revised), paragraph 16(a)

- 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. [Previously paragraph A14]

The nature of the accounting estimates and related disclosures that the auditor ~~would~~ expects to be included in the financial statements (Ref: Para. 12(d))

A25. 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~~, together with an understanding of the applicable financial reporting framework,~~ 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 ~~has ma~~makes~~de~~ the accounting estimates. [Previously paragraph A16]

The Entity's Internal Control Relevant to the Audit

~~Control Environment~~

The nature and extent of oversight and governance (Ref: Para. 12(e))

A26. In applying ISA 315 (Revised),[~~31~~] the culture of the organization may be important to the auditor's understanding of the nature and extent of oversight and governance as it relates to~~, including, for example,~~ whether:

- Management, with the oversight of those charged with governance, has created and maintained a culture of transparency and proper ethical behavior; and
- The strengths in the control environment elements collectively provide an appropriate foundation for the other components of internal control and whether those other components are not undermined by deficiencies in the control environment. [Previously paragraph A17A]

A27. 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 ~~of the accounting estimates~~~~activities~~procedures designed to detect

and correct any deficiencies in the design or operating effectiveness of controls over the accounting estimates. [Previously paragraph A17B]

A28. Obtaining an understanding of the oversight by those charged with governance may be important when there are accounting estimates that:

- 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
- Involves significant assumptions. [Previously paragraph A17C]

Management's application of specialized skills or knowledge, including the use of management's experts (Ref: Para. 12(f))

A29. The auditor may consider whether the following circumstances increase the likelihood that management ~~may~~ needs to engage an expert:[32]

- 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.[33]
- The unusual or infrequent nature of the condition, transaction or event requiring an accounting estimate. [Previously paragraph A17D]

A30. A failure by management to apply the required specialized skills or knowledge, including engaging an expert when management does not otherwise have access to an individual with such skills and knowledge, ~~increases~~ affects control risk. [Previously part of paragraph 17D]

The entity's risk assessment process (Ref: Para. 12(g))

A31. Understanding how the entity's risk assessment process identifies and addresses risks relating to accounting estimates ~~the entity identifies and assesses risks to be managed arising from changes in the following matters~~ may assist the auditor in ~~understanding how management takes inherent risk factors into account~~considering the inherent risk factors in relation to 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

[32] ISA 500, paragraph 8

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

- Key personnel. [Previously paragraph A17E]

[Paragraph A17F relocated to A44]

A32. Matters that the auditor may consider in obtaining an understanding of how management identifies and addresses the susceptibility to management bias in making accounting estimates include~~s~~ whether, and if so how, management:

- ~~Identifies and~~P ~~p~~ays particular attention to selecting or applying the methods, assumptions and data used in making ~~to~~ accounting estimates that are subject to or affected by the inherent risk factors to ~~involve~~ a greater ~~levels~~ degree ~~of subjectivity in related judgments~~.
- 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, ~~or in~~ significant assumptions ~~sources of significant~~or the data ~~and significant assumptions,~~ 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. [Previously paragraph A17G]

The entity's information system relating to accounting estimates (Ref: Para. 12(h)(i))

A33. The auditor's understanding of the entity's information system relating to accounting estimates ~~in paragraph 12(i)~~ relates to the requirements in paragraphs 18(a) and (d) of ISA 315 (Revised). In obtaining that understanding, 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 ~~management~~the information system addresses the completeness of accounting estimates, in particular for estimates related to liabilities. [Previously paragraph A25]

A34. During the audit, the auditor may identify transactions, events and conditions that give rise to the need for accounting estimates that management failed to identify. ISA 315 (Revised) deals with circumstances where the auditor identifies risks of material misstatement that management failed to identify, including determining whether there is a significant deficiency in internal control with regard to the entity's risk assessment process.[34] [Previously paragraph A25A]

~~Management's Identification of Transactions, and Events and Conditions that Are Significant to the Financial Statements (Ref: Para. 10(i)(i)~~

~~A25Aa. The auditor may obtain an understanding of whether and how information systems provide information used in quantitative and qualitative disclosures in the financial statements. This may include a system developed and maintained by the entity primarily for internal reporting, but which also captures, processes and generates data that may be included in disclosures relating to accounting estimates.~~

31 ISA 315 (Revised), paragraph 17

Management's Identification of the Relevant Methods, Assumptions and Sources of Data (Ref: Para. 12(h)(ii)(a)

[A25B moved to A21]

A35. 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. [Previously paragraph A25C]

A36. If management has not changed the method for making an accounting estimate, considerations may include whether ~~that~~ the continued use of the previous methods, assumptions and data is appropriate in view of the current environment or circumstances. [Previously paragraph A25D]

Methods (Ref: Para. 12(h)(ii)(a)(i))

A37. 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. [Previously paragraph A26]

Models

A38. 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, such as an expected credit loss model or the use of a fair value using level 3 inputs, controls that specifically address the effects of complexity or~~and~~ subjectivity are more likely to be relevant to the audit. When controls that address complexity around models are present, controls over data integrity are more likely to be relevant to the audit. Factors that may be appropriate for the auditor to consider in obtaining an understanding of the model and of control activities relevant to the audit 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:
  - o The model's theoretical soundness;
  - o The model's mathematical integrity; and
  - o 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~~under~~ the circumstances ~~and~~ in accordance with the requirements of the applicable financial reporting framework. When the adjustments are not appropriate ~~in the context of the requirements of the applicable financial reporting framework~~, 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 results of any validation performed on it and the nature of, and basis for, any adjustments made to its output. [Previously paragraph A30]

Assumptions (Ref: Para. 12(h)(ii)(a)(ii))

A39. 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. [Previously paragraph A33]

A40. 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. [Previously paragraph A34]

A41. Assumptions used in making an accounting estimate are referred to as significant assumptions in this ISA if a reasonable variation in the assumption would materially affect the measurement of the accounting estimate. ~~Data also may be considered to be significant if, for example, the selection of a particular data set from among a choice of appropriate alternatives would materially affect the measurement.~~ A sensitivity analysis may be useful in demonstrating the degree to which the measurement varies based on one or more assumptions ~~or on the data~~ used in making the accounting estimate. [Previously paragraph A35]

Inactive or illiquid markets

A42. When markets are inactive or illiquid~~ (also see paragraphs 23A-23B of Appendix 1)~~, 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. [Previously paragraph A38]

Data (Ref: Para. 12(h)(ii)(a)(iii))

A43. Matters that the auditor may consider in obtaining an understanding of ~~the~~ 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 the information technology systems 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. [Previously paragraph A41]

How management takes steps to understand and address estimation uncertainty (Ref: Para. ~~8,~~ 12(h)(ii))

A44. Matters that may be appropriate for the auditor to consider relating to ~~in obtaining an understanding of~~ whether and how management has taken appropriate steps to understand the degree of estimation uncertainty~~, and if so, how management has taken into account estimation uncertainty~~ include, for example:

- Whether, and if so, how management identified alternative methods, significant assumptions or sources of ~~significant~~ 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 ~~data or~~significant assumptions or the data used in making the accounting estimate~~on the accounting estimate~~.
- ~~How management selected its point estimate. [Previously paragraph A17F]~~

~~Selection of a point estimate and related disclosures for inclusion in the financial statements (Ref: Para. 10(i)(iv))~~

A45. Matters that may be appropriate for the auditor to consider relating to whether and how management has taken appropriate steps to address estimation uncertainty include how management selected its point estimate and related disclosures about estimation uncertainty. 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 representative ~~of the range~~ of reasonably possible measurement outcomes and, in some cases, may indicate that the most relevant amount may be in the central part of that range. [Previously paragraph A41A]

A46. For example, with respect to fair value estimates, IFRS[35] 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. [Previously paragraph A41B]

A47. 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~~, which~~ may ~~include~~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:
  - o Assumptions developed internally; or
  - o 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 ~~and implications of~~ estimation uncertainty.
- Fair value information.
- Information about sensitivity analyses derived from financial models that demonstrates that management has considered alternative assumptions. [Previously paragraph A41C]

[35] IFRS 13, Fair Value Measurement, paragraph 63

A48. 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 ~~a significant~~higher ~~risk~~ likelihood or magnitude of ~~a~~ 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:
    - o The nature of the assumption or other source of estimation uncertainty;
    - o The sensitivity of carrying amounts to the methods and assumptions used, including the reasons for the sensitivity;
    - o 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
    - o 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:
    - o Information regarding the significance of fair value accounting estimates to the entity's financial position and performance; and
    - o 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. [Previously paragraph A41D]

Control~~s~~ Activities Relevant to the Audit Over~~Relating to~~ Management's Process for Making Accounting Estimates (Ref: Para 12(i))

A49. As part of obtaining an understanding of the control activities relevant to the audit, 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 ~~level of~~ effectiveness of the design of the control activities. Generally, controls that address~~ing~~ ~~the inherent risk factors of~~ subjectivity and estimation uncertainty are more difficult to design, and consequently may be less effective, than~~,~~ controls that address complexity. ~~have varying levels of design effectiveness and may be designed to be less effective than controls addressing complexity.~~ The effectiveness of controls addressing complexity may vary depending on the reason for, and the nature of, the complexity. It may be easier to design more effective controls related to a method that is routinely used or over ~~If the complexity relates to application of a systematic method or~~ the integrity of data~~,~~ ~~the controls may have a higher level of effectiveness of the design~~. [Previously paragraph A58]

A50. ~~Circumstances in which it will likely be more important for t~~The auditor's judgment about controls relevant to the audit, and therefore the need ~~-~~to ~~understand~~ evaluate the design of those controls and determine whether they have been implemented~~ation of controls, and therefore identify them as relevant to the audit~~, may depend on the complexity associated with the accounting estimate. Such complexity may indicate ~~include whether there is~~ an increased need for the application of specialized skills or knowledge, ~~and~~ or may arise from ~~whether management~~the ~~makes~~ extensive use of information technology in making the estimates. [Previously paragraph A58A]

A51. When management makes extensive use of information technology in making an accounting estimate, controls relevant to the audit are likely to include general IT controls and application controls. Such controls may address risks related to:

- Whether the information systems have the capability and are appropriately configured to process large volumes of data;

- Complex calculations in applying a method. When diverse systems are required to process complex transactions, regular reconciliations between the systems are made, in particular when the systems 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~~s~~, 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 surrounding journal entries. [Previously paragraph A58B]

A52. In some industries, such as the banking or insurance industry, the term governance may be used to describe activities within the control environment, monitoring ~~controls~~, and other components of the system of internal control, as described in ISA 315 (Revised).[36] [Previously paragraph A58C]

~~A58D. The auditor's risk assessment procedures may be directed at understanding management's review or risk assessment processes related to accounting estimates. How management addresses the completeness of accounting estimates, particularly estimates related to liabilities, is often an important consideration of the auditor.~~ [Last sentence included in A25]

~~*Monitoring of Controls*~~

A53. 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 control activities 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. [Previously paragraph A59]

Reviewing the Outcome or Re-Estimation of Previous Accounting Estimates (Ref: Para. 13)

A54. 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~~and~~ 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

36 ISA 315 (Revised) paragraph A77

identifying such circumstances or conditions and in determining the nature, timing and extent of further audit procedures. [Previously paragraph A61]

A55. A~~s a~~ retrospective review may provide audit evidence that supports the identification and assessment of the risk of material misstatement in the current period. Such a~~, a~~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. [Previously paragraph 62]

A56. A retrospective review of management judgments and assumptions related to significant accounting estimates is required by ISA 240.[37] As a practical matter, the auditor's review of previous accounting estimates as a risk assessment procedure in accordance with this ISA may be carried out in conjunction with the review required by ISA 240. [Previously paragraph A63]

A57. Based on the auditor's previous assessment of the risk of material misstatement, for example, if inherent risk is assessed as higher for a particular accounting estimate, t~~T~~he auditor may judge that a more detailed retrospective review is required~~ for risks of material misstatement related to those previous accounting estimates that the auditor has assessed as higher on the spectrum of inherent risk~~. As part of the detailed retrospective review, the auditor may pay particular attention, when possible, 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. [Previously paragraph A64]

A58. 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 ~~would~~ 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 risk of material misstatement in the current period. [Previously paragraph A65]

A59. 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 preparation of those financial statements~~ in the context of the applicable financial reporting framework. Such a difference may call into question management's process for taking available information into account in making the accounting estimate. Many financial reporting frameworks contain guidance on distinguishing between

[37] ISA 240, *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements*, paragraph 32(b)(ii)

changes in accounting estimates that constitute misstatements and changes that do not, and the accounting treatment required to be followed in each case.[38] [Previously paragraph A66]

Specialized Skills or Knowledge (Ref: Para. 14)

A60. Matters that may affect the auditor's determination of whether specialized skills or knowledge are~~is~~ required include, for example:[39]~~[40,41]~~

- 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.
- 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. [Previously paragraph A67]

A61. 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.[42] [Previously paragraph 67A]

A62. Many accounting estimates do not require the application of specialized skills or knowledge. For example, for most audits it is unlikely that specialized skills or knowledge ~~would~~ may be needed for a simple inventory obsolescence calculation. However, for example, for expected credit losses of a~~n internationally active~~ banking institution or the insurance contract liability for an insurance entity, the auditor is likely to conclude that it is necessary to apply specialized skills or knowledge. [Previously paragraph A69]

Identifying and Assessing the Risks of Material Misstatement (Ref: Para. 15)

A63. Paragraph A42 of ISA 200 states that the ISAs do not ordinarily refer to inherent risk and control risk separately. However, this ISA 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

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38 ISA 560, Subsequent Events, paragraph 14

39 ISA 220, *Quality Control for an Audit of Financial Statements*, paragraph 14 and ISA 300, *Planning an Audit of Financial Statements*, paragraph 8(e)

~~40 ISA 300, *Planning an Audit of Financial Statements*, paragraph 8(e)~~

~~41 ISA 220, *Quality Control for an Audit of Financial Statements*, paragraph 14~~

42 ISA 620, *Using the Work of an Auditor's Expert*

risks of material misstatement, including significant risks, at the assertion level for accounting estimates in accordance with ISA 330.[43] [Previously paragraph A70]

A64. In ~~making the separate assessment of~~assessing inherent risk, the auditor is required to take into account the degree to which the accounting estimate is subject to, or affected by, estimation uncertainty, complexity, subjectivity, or~~and~~ other inherent risk factors. The auditor's consideration of the inherent risk factors may also provide information to be used in determining:

- Where inherent risk is assessed on the spectrum of inherent risk;
- The reasons for the assessment given to the risks of material misstatement at the assertion level~~;~~ , and that t~~T~~he auditor's further audit procedures in accordance with paragraph 17 are responsive to those reasons.

The interrelationships between the inherent risk factors are further explained in Appendix 1. [Previously paragraph A71]

A65. The reasons for the auditor's assessment of the risks of material misstatement 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. [Previously paragraph A74]

A66. 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~~. For example, for simple accounting estimates~~ and~~,~~ the auditor may identify fewer risks or assess ~~the~~ inherent risks at the lower end of the spectrum of inherent risk. [Previously paragraph 74A]

A67. 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 ~~is~~ 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

[43] ISA 330, paragraph 7(b)

the persuasiveness of the audit evidence needed in responding to the assessed risks. [Previously paragraph A74B]

A68. The auditor's application of professional skepticism may be particularly important w~~W~~hen, based on the auditor's understanding of the entity and its environment, the reasons for the assessment given to the risk of material misstatement include a high degree of estimation uncertainty or subjectivity. [Sentence previously included in A92A]

[Paragraph A74A was relocated to A1R in the papers for the April 24, 2018 teleconference]

~~A74A. Paragraph 13 also requires a separate assessment of control risk for accounting estimates. In doing so, the auditor takes into account whether the auditor's further audit procedures contemplate planned reliance on the operating effectiveness of controls, and the extent to which the controls address the assessed inherent risks at the assertion level.~~

A69. 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~~, when relevant,~~ the risks of material misstatement at the assertion level,[44] regardless of the ~~degree of estimation uncertainty and the~~ degree to which the accounting estimate was subject to, or affected by~~,~~ estimation uncertainty, complexity, subjectivity or other inherent risk factors. This also may influence the auditor's selection of the approach to testing the accounting estimate in accordance with paragraph 17. 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 estimate, and therefore may assess ~~the~~ inherent risk ~~of material misstatement~~ at the lower end of the ~~risk~~ spectrum of inherent risk. The payment of the bonuses subsequent to period end may provide sufficient appropriate audit evidence regarding the assessed risk of material misstatement. [Previously paragraph A75]

A70. The auditor's assessment of control risk may be done in different ways depending on preferred audit techniques or methodologies. ~~Control risk and control reliance have an inverse relationship.~~ 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. Control risk and control reliance have an inverse relationship. For example, if control risk is assessed as maximum, the auditor contemplates no planned reliance on the effective operation of controls. If control risk is assessed at less than maximum, the auditor contemplates a level of planned reliance on the effective operation of controls.

[Paragraph A75A was relocated to A1s in the papers for the April 24, 2018 teleconference]

The Degree of Estimation Uncertainty (Ref: Para. 15(a))

A71. 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~~s~~ that inherently ha~~ve~~s a high level of estimation uncertainty. For example, the financial reporting framework may require the use of ~~a fair value~~unobservable~~s using level 3~~ inputs.

[44] ISA 315 (Revised), paragraph 31

- o 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 ~~the~~ various assumptions that are interrelated.

- o Disclosures about estimation uncertainty. ~~There may be a risk of material misstatement related to the failure to make a disclosure related to 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:

  - o 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

  - o 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). [Previously paragraph A75B]

A72. An ~~seemingly immaterial~~ accounting estimate that appears to be insignificant may have the potential to result in a material misstatement ~~due to the estimation uncertainty associated with the accounting estimate~~; that is, 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~~its estimation uncertainty~~ because, for example, the accounting estimate may be understated. [Previously paragraph 75D]

A73. ~~In some circumstances, the estimation uncertainty is so high that a reasonable accounting estimate cannot be made.~~ The applicable financial reporting framework may~~, therefore,~~ preclude recognition of an~~the~~ 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 A114–A115, A142–A143). [Previously paragraph A75E]

The Effects of Complexity or~~and~~ Subjectivity (Ref: Para. 15(b))

The Degree to Which Complexity Affects the Selection and Application of the Method ~~Used in Making the Accounting Estimate~~

A74. 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 ~~affects the method used in making the accounting estimate~~, 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 a risk of material misstatement. T~~In relation to developing a model, t~~here may be a greater susceptibility to a risk of material misstatement ~~relating to the use of models. This may be the case~~ 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 ~~in~~ the applicable financial reporting framework, which~~.~~ ~~The nature of the measurement basis in the applicable financial reporting framework~~ may result in the need for a complex method that requires multiple sources of historical and forward-~~-~~looking data or assumptions, with multiple inter-relationships between them. For example, an expected credit loss provision may require judgments about~~expectations of~~ 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 ~~expectations~~ about future insurance contract payments to be projected based on historical experience and current and assumed future trends. [Previously paragraph A79]

The Degree to Which Complexity Affects the Selection and Application of the Data ~~on Which the Accounting Estimate Is Based~~

A75. 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 ~~affects the data on which the accounting estimate is based~~, the auditor may consider:

- The complexity of the process to derive the data, taking into account~~,~~ t~~T~~he relevance and reliability of the data source. Data from certain sources may be more reliable than from others. ~~For example, data obtained from internal systems outside the general and subsidiary ledgers may be more susceptible to misstatements because in some entities it may be difficult to determine whether there were appropriate controls and governance over such data.~~ 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 ~~(including any controls over the process)~~.

~~The relevance of the data source.Some data sources may be less relevant given the measurement objective as described by the financial reporting framework. For example, data from an external information source may be less relevant in making a fair value estimate if it is not based on observable market transactions.~~

- The inherent complexity in maintaining the integrity of the information systems. When there is a complex organizational structure or a lack of integration between systems in different parts of the entity, there may be inherent complexity in maintaining the integrity of the information systems because d~~. D~~ata that is used to make ~~the~~ an accounting estimate~~s~~ may be processed by one or more information systems. ~~In order to maintain the integrity of the information systems, effective general IT controls and controls over the flow of data through the systems may be necessary, particularly w~~In such circumstances, the auditor will likely obtain an understanding of the controls and may also determine that it is necessary to test their operating effectiveness. ~~The integrity of the information systems is important w~~When there is a high volume of data and multiple sources of the data, management is more likely to use general IT controls or application controls to address data integrity. [Previously paragraph A82]

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

A76. In taking into account the degree to which the selection and application of method, assumptions or data are affected by subjectivity~~ affects the selection of methods, assumptions or data~~, the auditor may consider:

- The need for m~~M~~anagement's experience and competence. A lack of management's experience or competence~~ by management~~, including a lack of ~~availability to management with~~ the necessary skills or knowledge, ~~. This factors~~ may result in risks related to the selection of inappropriate method, assumptions and data. 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. When management lacks the competence or experience in a certain area and does not use a management's expert, there may be an inherent risk that:
    - o The method selected is not appropriate or does not comply with the applicable financial reporting framework.
    - o The assumptions used are not appropriate in the context of the measurement objectives and other requirements of the applicable financial reporting framework.
    - o Management selects a data source that is not ~~relevant and reliable~~appropriate.
- 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 is a source of inherent estimation uncertainty, and gives 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. [Previously paragraph A83]

~~A85. When accounting estimates are subject to a high degree of subjectivity, the accounting estimate is likely to be more susceptible to the potential for management bias. For example, subjectivity may result in a wide range of possible measurement outcomes of the accounting estimate. 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 the preceding periods may influence the planning and risk identification and assessment activities of the auditor in the current period.~~

Other Inherent Risk Factors

A77. The degree of ~~estimation uncertainty~~ subjectivity associated with an accounting estimate influences the susceptibility of the accounting estimate to misstatement due to management bias or fraud. For example, when accounting estimates are subject to a high degree of subjectivity, the accounting estimate is likely to be more susceptible to the potential for management bias 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. ~~When the reasons for the assessment given to the risk of material misstatement include a high degree of estimation uncertainty, the auditor's application of professional skepticism may be important.~~ For continuing audits, indicators of possible management bias identified during the audit of ~~the~~ preceding periods may influence the planning and risk ~~identification and assessment activities of the auditor~~assessment procedures in the current period. [Previously paragraph A92A]

Significant Risks (Ref: Para. 16)

A78. 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 are a significant risk.

A79. Obtaining an understanding of the entity's controls involves evaluating the design of those controls and determining whether they have been implemented, by performing procedures in addition to inquiry of the entity's personnel.[45]

A80. 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 570 (Revised)[46] establishes requirements and provides guidance in such circumstances. [Previously paragraph 92C]

Responses to the Assessed Risks of Material Misstatement (Ref: Para. 17)

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 17. 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. [Previously paragraph A92D]

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.[47] When the auditor only considers information prepared by management, the audit evidence is likely to be corroborative as management will present information that supports their position. Although the auditor is required to obtain audit evidence in an unbiased manner, the auditor is not required to perform an exhaustive search to identify all possible sources of audit evidence. [Previously part of paragraph A92E]

A83. ISA 330 requires the auditor to obtain more persuasive audit evidence the higher the auditor's assessment of the risk of material misstatement. Therefore, the consideration of the nature or quantity of the audit evidence may be more important when inherent risk relating to an accounting estimate is assessed at the higher end of the spectrum of inherent risk. [Previously part of paragraph A92E]

Scalability

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

[45] ISA 315 (Revised), paragraph 13

[46] ISA 570, (Revised), *Going Concern*

[47] ISA 500, ~~*Audit Evidence*,~~ paragraph A1

- The assessed risks of material misstatement, which affects the persuasiveness of the audit evidence needed and ~~may~~ influences the approach the auditor selects to audit an accounting estimate. For example, the assessed risk of material misstatement 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 considering ~~determining whether~~ events occurring up to the date of the auditor's report ~~provide audit evidence regarding the accounting estimate~~, rather than through other testing approaches.

- The reasons for the assessed risk of material misstatement. For example, when the auditor identifies and assesses a risk of material misstatement relating to complex data used in making the accounting estimate ~~as not being acceptably low~~ and the auditor has decided to use the testing approach to test how management makes the accounting estimate, the auditor's further audit procedures may be directed towards~~target~~ the data used to make the accounting estimate. [Previously paragraph A94]

When the Auditor Intends to Rely on Relevant Controls (Ref: Para: 18)

~~A97A. In some cases, it will be more important for the auditor to test the operating effectiveness of relevant controls when responding to in addressing the assessed risks of material misstatements. This may be the case when there is an increased need for the application of specialized skills or knowledge, or management may make extensive use of information technology in making the estimates.~~

A85. Even when the auditor determines that an identified risk of material misstatement is not a significant risk, testing the design and implementation of relevant controls may be an appropriate audit approach when the inherent risk is assessed as higher on the spectrum of inherent risk. This may be the case when the accounting estimate is subject to, or affected by a high degree of estimation uncertainty, subjectivity or complexity. Similarly, when the inherent risk is assessed as higher on the spectrum of inherent risk, including when the auditor determines that there is a significant risk, testing the operating effectiveness of controls may be an appropriate audit approach when the accounting estimate is affected by a high degree of complexity. When the accounting estimate is affected by a high degree of subjectivity, and therefore requires significant judgment, inherent limitations in the effectiveness of controls may be higher and substantive procedures may provide more persuasive audit evidence.

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

- The nature, frequency and volume of transactions;
- The effectiveness of the design ~~strength~~ of the controls, including whether controls are appropriately designed to respond to the assessed inherent risk,~~s of material misstatement~~ 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 systems to support transactions;
- The monitoring of controls and identified deficiencies in control procedures;
- The issues the controls are intended to address, for example, controls related to the exercise of judgment~~s~~ compared with controls over supporting data. ~~Substantive tests are more likely to be effective than relying on controls related to the exercise of judgment~~;

- The competency of those involved in the control activities;
- The frequency of performance of the control activities;
- ~~The level of precision the controls are intended to achieve; and~~
- The evidence of performance of control activities.~~.~~ [Previously paragraph A97B]

Substantive Procedures Alone Cannot Provide Sufficient Appropriate Audit Evidence

A87. Some industries, such as the financial services industry, make extensive use of IT to conduct their business or have a large number of accounting estimates, many of which are highly subjective or complex. It is therefore more likely that substantive procedures alone cannot provide sufficient ~~and~~ appropriate audit evidence. For example, an expected credit loss provision may require information from the entity's risk management system and it may require the use of large volumes of data, as it is based on a large number of individually small mortgages. [Previously paragraph A98A]

A88. ~~Factors that may indicate that~~ Circumstances where substantive procedures alone cannot ~~may not~~ provide sufficient appropriate audit evidence at the assertion level may include:

~~include:~~

- When ~~The need to combine information from the general and subsidiary ledgers with information obtained from outside the general and subsidiary ledgers~~controls are necessary for the initiation, recording, processing, or reporting of information obtained from outside the general and subsidiary ledgers. For example, an expected credit loss provision and an insurance contract liability may require the use of information from the entity's risk management system.

~~The volume of transactions. A high volume of transactions makes it more difficult to design substantive procedures that alone provide sufficient appropriate audit evidence at the assertion level.~~

- ~~Significant I~~information supporting one or more relevant assertions is electronically initiated, recorded, processed, or reported. This is likely to~~may~~ 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. ~~For such assertions, audit evidence may be available only in electronic form.~~ For example, a telecommunications company may record all information relating to calls and data electronically and generate invoices based on that data.

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. In addition, the potential for improper initiation or alteration of information to occur and not be detected may be greater if ~~information is initiated, recorded, processed, or reported only in electronic form and~~ appropriate controls are not operating effectively. [Previously paragraph A98]

A89. In some jurisdictions, 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 ~~an~~ additional procedures~~engagement~~ in relation to, or to provide an assurance conclusion on, internal control~~s~~. In these and other similar circumstances, the auditor may be able to use information obtained in performing such procedures ~~engagements~~ as audit evidence, subject to determining whether subsequent changes have occurred that may affect its relevance to the audit. [Previously paragraph A99]

~~Determining Whether~~Considering Events Occurring up to the Date of the Auditor's Report ~~Provide Audit Evidence Regarding the Accounting Estimate~~ (Ref: Para. 20)

A90. ~~Determining whether~~Considering events occurring up to the date of the auditor's report ~~provide audit evidence regarding the accounting estimate~~ may be an appropriate approach~~y~~ when such events provide audit evidence that corroborates or contradicts relevant assertions about the accounting estimate. Accordingly, there may be no need to perform additional audit procedures on the accounting estimate, provided that sufficient appropriate audit evidence ~~about the events~~ is obtained. For example, sale of the complete inventory of a discontinued product shortly after the period end may provide 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 ~~as set out~~ in paragraph 17 to obtain sufficient appropriate audit evidence to address the risks of material misstatement at the assertion level. [Previously paragraph 100A]

A91. For some accounting estimates, events occurring up to the date of the auditor's report are unlikely to provide sufficient ~~and~~ 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. [Previously paragraph A100D]

A92. In some cases, events that contradict one or more~~the~~ assertions relating to the accounting estimate may indicate that management has ineffective processes for making accounting estimates, or that there is management bias in the making of accounting estimates. [Previously paragraph A100E]

A93. Even though the auditor may decide not to undertake this testing approach in respect of specific accounting estimates, the auditor is required to comply with ISA 560.[48] ISA 560 requires t~~T~~he auditor ~~is required~~ 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[49] and appropriately reflected in the financial statements.[50] Because the measurement of many accounting estimates, other than fair value accounting estimates, usually depends on the outcome of future conditions, transactions or events, the auditor's work under ISA 560 is particularly relevant. [Previously paragraph A100F]

Testing How Management Made the Accounting Estimate (Ref. Para. 21)

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

- ~~The accounting estimate is derived from the routine processing of data.~~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.

~~48 ISA 560, *Subsequent Events*~~

49 ISA 560, paragraph 6

50 ISA 560, paragraph 8

- The applicable financial reporting framework sets forth specific requirements regarding how management is expected to makes 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 also may be an appropriate response when neither of the other testing approaches is~~are~~ practical to perform, or may be an appropriate response in combination with one of the other testing approaches. [Previously paragraph A100G]

~~A100H. 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.~~

Methods

The selection of the method (Ref: Para. 22(a) 23(a), 24(a))

A95. Relevant considerations for the auditor regarding the appropriateness of the method selected ~~by management~~ in the context of ~~the requirements of~~ the applicable financial reporting framework, and, if applicable, the appropriateness of changes from the prior period may include~~, for example~~:

- 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~~asset or liability being estimated~~, the requirements of the applicable financial reporting framework, 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
- W~~hen there has been a change from the prior period, w~~hether the change is based on new circumstances or new information. When this is not the case, the change may not ~~is unlikely to~~ be reasonable ~~n~~or in compliance with the applicable financial reporting framework. Arbitrary changes result in inconsistent financial statements over time and may give rise to a financial statement misstatement or may be an indicator of possible management bias. (~~Also s~~See also paragraphs A131–A134)

These matters are important when the applicable financial reporting framework does not prescribe the method of measurement or allows multiple methods. [Previously paragraph A107]

A96. When management uses a ~~complex~~ method that is complex, an important factor that the auditor may ~~need to~~ consider regarding the appropriateness of the method is whether there were other available valuation concepts or techniques that, in the circumstances, might have been more appropriate in the context of the applicable financial reporting framework. (Also see paragraph A100) [Previously paragraph A107A]

A97. When a change from prior periods in a method, assumption or 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, it may be appropriate for the auditor to challenge management regarding the appropriateness of these assumptions.

Indicators of management bias (Ref: Para. 22(b), 23(b), 24(b))

A98. ~~The auditor shall obtain sufficient and appropriate audit evidence whether the methods, significant assumptions, or significant data give rise to indicators of management bias. For example, for a particular accounting estimate, if management has developed an appropriate range for three different assumptions, and in each case the assumption used in making the accounting estimate was from the same end of the range.~~ 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 ~~selected~~ 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. [Previously paragraph A107A]

Complex modelling (Ref: Para. 22(d))

A99. 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 for determining the amount of a relevant valuation attribute; or
- It is difficult to maintain the integrity (i.e., 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. [Previously paragraph A1B]

A100. ~~Depending on the circumstances,~~M ~~m~~atters 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 ~~and when there has been a change to the model~~. The entity's validation process may include evaluation of:
  - o The model's theoretical soundness;
  - o The model's mathematical integrity;
  - o The accuracy and completeness of the model's data and assumptions; and
  - o The model's output as compared to actual transactions.
- Appropriate change control policies and procedures exist.
- Management uses appropriate skills and knowledge in ~~applying the method~~ using the model.

These considerations may also be useful for a method that does not involve complex modelling. [Previously paragraph A108C]

A101. ~~When~~ M~~m~~anagement may make ~~has made~~ adjustments to the output of the model ~~(see paragraph A30)~~ to meet the requirements of the applicable financial reporting framework. In some industries these adjustments are referred to as overlays. ~~, consideration of those adjustments is likely to be important in obtaining sufficient appropriate audit evidence. Several types of methods~~

~~used for the valuation of accounting estimates require adjustments~~. ~~For example, fulfilment value accounting for valuing insurance contracts and overlay adjustments when accounting for expected credit losses.~~ 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. [Previously paragraph A108D]

Integrity of significant assumptions~~,~~ and the ~~significant~~ data used in applying the method (Ref: Para. 22(e))

A102. Maintaining the integrity of ~~significant data and~~ significant assumptions~~,~~ and the data in applying the method refers to the maintenance of the accuracy and~~,~~ completeness ~~and consistency~~ of the data and assumptions through all stages of information processing. A failure to maintain such integrity may result~~s~~ 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. [Previously paragraph A108E]

Significant Assumptions (Ref: Para. 23)

A103. Relevant considerations for the auditor regarding the appropriateness of the significant assumptions ~~selected by management~~ in the context ~~of the requirements~~ of the applicable financial reporting framework, and, if applicable, the appropriateness of changes from the prior period may include~~, for example~~:

- Management's rationale for the selection of the assumption; ~~and~~
- Whether the assumption is appropriate in the circumstances given the nature of the ~~asset or liability being estimated~~accounting estimate, the requirements of the applicable financial reporting framework, and the business, industry and environment in which the entity operates;~~.~~ and
- W~~hen there has been a change from the prior period, w~~hether the change from prior periods in selecting an assumption is based on new circumstances or new information. When it is not, ~~it~~ the change may not ~~is unlikely to~~ be reasonable nor in compliance with the applicable financial reporting framework. Arbitrary changes in an accounting estimate may give rise to a material ~~financial statement~~ misstatement of the financial statements or may be an indicator of possible management bias (see paragraphs A131–A134). [Previously paragraph A108F]

A104. Management may evaluate alternative assumptions or outcomes of the accounting estimates, which can 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 can be variation because different market participants will use different assumptions. A sensitivity analysis could lead to the development of a number of outcome scenarios, sometimes characterized as a range of outcomes by management, such as "pessimistic" and "optimistic" scenarios. [Previously paragraph A109]

A105. Through the knowledge obtained in the audit, the auditor 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 315 (Revised)[51] requires the engagement partner to consider whether information obtained from those other engagements is relevant to identify risks of material misstatement. This information may also be useful to consider whether significant assumptions are consistent with each other.

A106. The appropriateness ~~reasonableness~~ of the significant assumptions ~~used~~ 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 it to do so. ~~Although t~~The extent of audit evidence to be obtained about management's intent and ability is a matter of professional judgment, taking into account whether such intent and ability are relevant to obtaining sufficient appropriate audit evidence about the significant assumptions or the application of the requirements of the applicable financial reporting framework. When applicable, the auditor's procedures may include the following:

- Review of management's history of carrying out its stated intentions.
- Inspection~~Review~~ 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. [Previously paragraph A111]

Data (Ref: Para. 24)

A107. Relevant considerations for the auditor regarding the appropriateness of the data selected for use in the context ~~of the requirements~~ of the applicable financial reporting framework, and, if applicable, the appropriateness of the changes from the prior period may include~~, for example~~:

- Management's rationale for the selection of the data;~~.~~
- Whether the data is appropriate in the circumstances given the nature of the ~~asset or liability being estimated~~accounting estimate, the requirements of the applicable financial reporting framework, and the business, industry and environment in which the entity operates; and~~.~~
- W~~hen there has been a change from the prior period, w~~hether 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

[51] ISA 315 (Revised), paragraph 8

applicable financial reporting framework. Arbitrary changes in an accounting estimate result in inconsistent financial statements over time and may give rise to a financial statement misstatement or may be an indicator of possible management bias (see paragraphs A131–A134). [Previously paragraph A111A]

Relevance and reliability of the data (Ref: Para. 24(c))

A108. ISA 500 contains requirements and guidance about whether the information produced by the entity is accurate and complete and whether the information is sufficiently precise and detailed for the auditor's purposes.[52]

Complex legal or contractual terms (Ref: Para. 24(d))

A109. 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:
    - o ~~Obtain an understanding of, and e~~Evaluate, the underlying business purpose for the transaction or agreement; and
    - o Consider whether the terms of the contracts are consistent with management's explanations. [Previously paragraph A111C]

~~Management's Selection of a Point Estimate and Related Disclosures~~

Management's S~~s~~teps to U~~u~~nderstand and A~~a~~ddress E~~e~~stimation U~~u~~ncertainty (Ref: Para. 25(a))

A110. To determine whether management has taken appropriate steps to understand and address estimation uncertainty, including developing a point estimate and related disclosures that meet the measurement objective, relevant considerations for the auditor 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 (sensitivity analysis);

(b) Identified the degree to which, in the measurement process, ~~inherent~~ complexity or~~and~~ subjectivity ~~and other inherent risk factors~~ affect ~~susceptibility of assertions about~~ the ~~accounting estimate to~~ risk of material misstatement ~~that could be material~~, 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 ~~in providing, in the financial statements, a faithful representation of the item being estimated,~~ through appropriately selecting management's

[52] ISA 500, paragraph 9

point estimate and related disclosures that describe the estimation uncertainty. [Previously paragraph A113]

Management's S~~s~~election of a P~~p~~oint E~~e~~stimate and R~~r~~elated D~~d~~isclosures of E~~e~~stimation U~~u~~ncertainty (Ref: Para. 25(b))

A111. Matters that may be relevant for the auditor in evaluating whether sufficient appropriate audit evidence has been obtained about management's point estimate and 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 ~~in the measurement process~~ 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 ~~and appropriately applied~~.
- Management's point estimate is ~~appropriately~~ representative ~~of the range~~ of 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. [Previously paragraph A113A]

A112. Relevant considerations for the auditor regarding the reasonableness 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 ~~will be required~~, ~~having regard~~taking into account ~~to~~ the requirements of the applicable financial reporting framework~~, including requirements relating to fair presentation and faithful representation~~. [Previously paragraph A116]

A113. In obtaining sufficient ~~and~~ appropriate audit evidence about the reasonableness of the disclosures in the financial statements that describe the estimation uncertainty, the auditor takes into account 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.[53]

[53] IFRS 13, *Fair Value Measurement*, paragraph 92

- 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.
- 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~~specifically~~ 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. [Previously paragraph A120]

A114. ~~The auditor may conclude that management's judgments in determining the disclosures that describe estimation uncertainty are not appropriate or, the auditor may conclude that the financial statements do not provide disclosures necessary to achieve fair presentation, even when the disclosures are in accordance with the disclosure requirements of the applicable financial reporting framework~~ The greater the degree to which an accounting estimate is subject to estimation uncertainty, the more persuasive the audit evidence needs to be ~~about~~ for the auditor to appropriately evaluate whether management's point estimate and related disclosures are reasonable. [Previously paragraph A124]

A115. ~~In some cases, the auditor may consider it appropriate to encourage management to describe, in the notes to the financial statements, the circumstances relating to the estimation uncertainty.~~ 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.[54] [Previously paragraph A125]

When M~~m~~anagement H~~h~~as N~~n~~ot T~~t~~aken A~~a~~ppropriate~~ly~~ S~~s~~teps to U~~u~~nderstand and A~~a~~ddress the E~~e~~stimation U~~u~~ncertainty (Ref: Para. 26(b))

A116. When ~~determining whether to develop an auditor's point estimate or range, in circumstances where~~ the auditor ~~has~~ determines~~d~~ that management has not taken appropriate~~ly~~ steps to understand and address estimation uncertainty, it may be important for the auditor to take into account relevant ethical requirements, for example those that address prohibitions on assuming management responsibilities~~ that may be relevant~~. [Previously paragraph A126A]

A117. If, after considering management's response, the auditor determines that it is not possible ~~appropriate~~ to develop an auditor's point estimate or range~~ and that the auditor is unable to obtain sufficient appropriate audit evidence through adopting another approach in paragraph 15~~, the auditor is required to evaluate~~s~~ the implications for the audit or the auditor's opinion on the financial statements in accordance with paragraph 33. [Previously paragraph A126B]

Developing an Auditor's Point Estimate or Using an Auditor's Range (Ref: Para. 27-28)

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 response when, for example:

- ~~The accounting estimate has a lower degree of estimation uncertainty, and is affected to a lesser degree by complexity, subjectivity or other inherent risk factors.~~

[54] ISA 701, *Communicating Key Audit Matters in the Independent Auditor's Report*

- The auditor's review of similar accounting estimates made in the prior period financial statements suggests that management's current period process is ~~unlikely~~ not expected to be effective.
- The entity's controls within and over management's processes for determining accounting estimates are not well designed or properly implemented.
- Events or transactions between the period end and the date of the auditor's report 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 ~~available to the auditor~~ that can be used in developing an auditor's point estimate or a range.
- Management has not taken appropriate~~ly~~ steps to understand and address the estimation uncertainty (see paragraph 26). [Previously paragraph A126C]

A119. For example, ~~Developing this~~an ~~auditor's point estimate or range to test management's point estimate may be an appropriate~~ approach may be appropriate for a relatively simple accounting estimate with a single set of assumptions and data. Conversely, the auditor may determine that ~~the approach of~~ testing how management made the accounting estimate is more practical for a complex estimate with multiple data sets and assumptions, including testing controls relevant to the audit. [Previously paragraph A129]

A120. 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). [Previously paragraph A129A]

A121. 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. [Previously paragraph A129B]

A122. 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 ~~and selecting~~ 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 ~~the~~ a model, or to provide relevant assumptions.
- ~~Making reference to~~Consideration of other comparable conditions, transactions or events, or, where relevant, markets for comparable assets or liabilities. [Previously paragraph A131]

A123. 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). [Previously paragraph A131A]

~~A132. Whether the auditor develops a point estimate or range using management's or the auditor's own methods, assumptions or data, the auditor is required to obtain sufficient appropriate audit evidence to evaluate whether the methods, assumptions and data are appropriate in the context of the applicable financial reporting framework. Obtaining such evidence also may be important to the auditor's evaluation of whether the accounting estimate is reasonable or is misstated.~~

A124. The requirement in paragraph 28(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. [Previously paragraph A133]

A125. ~~In certain circumstances, t~~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 ~~may~~ is more likely to arise in circumstances when the estimation uncertainty associated with the accounting estimate is itself multiples of materiality, which ~~may be the case~~is more common in certain business sectors, such as insurance 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, 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. Paragraph A139 ~~also~~ includes additional considerations that may be relevant in these circumstances. [Previously paragraph A134]

Other Considerations Relating to Audit Evidence (Ref: Para. 29)

External Information Sources

~~A134A. Regardless of the testing approach selected, information from an external information source, whether obtained and used by the entity in preparing the financial statements or obtained independently by the auditor, may be identified and used as audit evidence, subject to considering the relevance and reliability of the information.~~

A126. As explained in ISA 500,[55] 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.

[55] ISA 500, Paragraph A31

- 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 ~~ordinarily~~ seek to understand the reasons for the diversity in views. The diversity may result from the use of different methods, ~~data or~~ assumptions, or data. For example, one source may be using current prices and another source using future prices. When the diversity relates to~~reflects~~ estimation uncertainty, the auditor is required by paragraph 25(b) to obtain sufficient appropriate audit evidence about whether, in the context of the applicable financial reporting framework,~~may need to consider the reasonableness of~~ the disclosures ~~made~~ in the financial statements that describe the estimation uncertainty are reasonable. In such cases professional judgment is also important in considering information, when available, 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).~~,~~ ~~the auditor may need to consider whether further procedures are appropriate to consider the method, data and assumptions used by the source,~~ Paragraph A33F of ISA 500 provides relevant guidance ~~as described in paragraph A33F of ISA 500~~. [Previously paragraph A134B]

A127. For fair value accounting estimates, additional considerations of the relevance and reliability of information obtained from external information sources may ~~also~~ include ~~the following~~:

(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. [Previously paragraph A134C]

A128. When information ~~is used~~ from an external information source is used as audit evidence, a~~other~~ relevant considerations for the auditor ~~for the auditor~~ may be~~include:In many circumstances, information regarding the methods, assumptions and other data applied by the external information source in developing the information may not be available and the auditor may not be able to consider the accuracy and completeness of the information, as there may be no contractual relationship between the external information source that requires the provision of information, or the external information source may refuse to provide information considered to be intellectual property.~~ whether there is information available, ~~The availability of~~ or sufficiently granular information, to understand the methods, assumptions and other data used by the external information source. This may ~~also~~ 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 A33Ga of ISA 500 provides guidance with respect to restrictions placed by the external information source on the provision of supporting information. [Previously paragraph A134D]

Management's Expert

A129. Assumptions, data and methods that may be made or identified by a management's expert become management's assumptions when used by management in making an accounting estimate. These assumptions, data and methods are therefore subject to the requirements in paragraph 21-26, as applicable. In addition, the auditor may also consider the source, relevance and reliability of information used by a management's expert that is used as audit evidence.

Disclosures Related to Accounting Estimates (Ref: Para. 30)

[Paragraph A138 is relocated and is now paragraph A142]

[Paragraph A138A is relocated and is now paragraph A143]

A130. Paragraph 30 requires the auditor's further audit procedures to address whether the disclosures related to an accounting estimate, which includes disclosures about estimation uncertainty, are reasonable in the context of the applicable financial reporting framework. When the auditor's further audit procedures include~~d~~ 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 25 and 28. The auditor then considers the audit evidence obtained about the disclosures as part of the overall evaluation, in accordance with paragraph 34, of whether the accounting estimates and related disclosures are reasonable in the context of the applicable financial reporting framework, or are misstated.

Indicators of Possible Management Bias (Ref: Para. 31)

A131. 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. [Previously paragraph A138B]

A132. 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 ~~significant~~ 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~~account~~ 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. [Previously paragraph A138C]

A133. Indicators of possible management bias may affect the auditor's conclusion as to whether the auditor's risk assessment and related responses remain appropriate. ~~, and t~~The auditor may also need to consider the implications for ~~the rest~~other aspects of the audit, including the need to further question the appropriateness of management's judgments in making accounting estimates. Further, ~~they~~ indicators of possible management bias may affect the auditor's conclusion~~evaluation~~ as to~~of~~ whether the financial statements as a whole are free from material misstatement, as discussed in ISA 700 (Revised).[56] [Previously paragraph A138D]

A134. In addition, in applying ISA 240, 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.[57] 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 ~~indicators of~~ 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. [Previously paragraph A138E]

Overall Evaluation Based on Audit Procedures Performed (Ref: Para. 32)

A135. The requirements of paragraphs 25 and 26 in ISA 330 are performed at the assertion level for classes of transactions, account balances and disclosures. Accordingly, the evaluation required by paragraph 32 may be combined for one or more accounting estimates that each relate to the same class of transactions, account balance or disclosure. 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.[58] 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 risk of material misstatement, the auditor may discover that the accounting estimate is more complex than originally contemplated, which may ~~indicate~~ call into question~~that~~ the assessment of the risk of material misstatement ~~may need to be revised~~ (~~that is~~for example, the ~~reasons for the assessment now include~~ 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 audit procedures to obtain further audit evidence.[59] [Previously paragraph A139]

56 ISA 700 (Revised), paragraph 11~~2~~

57 ISA 240, paragraph 32(b)

58 ISA 330, paragraph A60

59 See also ISA 315 (Revised), paragraph 31

A136. 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. [Previously paragraph A100H]

A137. Evaluating whether sufficient appropriate audit evidence has been obtained~~, and whether the accounting estimate is misstated,~~ involves essentially the same types of considerations applied whether the accounting estimate is recognized or disclosed in the financial statements. [Previously paragraph A146]

Determining Whether the Accounting Estimates are Reasonable or Misstated (Ref: Para. 34)

A138. The auditor's determination of whether the accounting estimates are reasonable, or are misstated is made at the assertion level, taking into account audit evidence obtained about accounting estimates relevant to each class of transactions, account balance or disclosure.

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~~. In other circumstances~~:

- When the audit evidence supports ~~or uses~~ a range, the size of the range may be wide~~large (including when the auditor's range is~~and in some circumstances may be multiples of materiality for the financial statements as a whole~~)~~. Although ~~A~~ a wide range may be appropriate in the circumstances, ~~does not mean that the range does not include only amounts that have been evaluated by the auditor to be reasonable, but~~ it may indicate that it is important for the auditor to ~~reconsider~~ challenge 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. [Previously paragraph A143A]

A140. Paragraphs A111 to A115 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. ~~Based on the audit evidence obtained, the auditor may conclude that there is sufficient appropriate audit evidence supporting management's point estimate.~~[Previously paragraph A143]

[Paragraph A146 is relocated and is now paragraph A137]

A141. ISA 450 also provides guidance regarding qualitative disclosures[60] and when misstatements in disclosures could be indicative of fraud.[61] [Previously paragraph A146A]

[60] ISA 450, paragraph A17

[61] ISA 450, paragraph A22

A142. 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[62] 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 ~~underlying~~ transactions and events in a manner that achieves fair presentation. ~~This may be the case, for example, w~~For example, when an accounting estimate is subject to a higher degree of ~~significant estimation uncertainty (see paragraphs A124–A125), . Given the importance of accounting estimates to the overall financial statements,~~ the auditor may determine that additional disclosures ~~related to accounting estimates~~ 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. ~~This may be the case, for example, when an accounting estimate is subject to significant estimation uncertainty (see paragraphs A124–A125).~~ [Previously paragraph A138]

A143. ISA 705 (Revised)[63] 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. [Previously paragraph A138A]

Written Representations (Ref: Para. 35)

A144. Written representations about specific accounting estimates may include representations:

- 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 requirements~~ 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. [Previously paragraph A153]

62 ISA 700 (Revised), paragraph 14

Communication with Those Charged With Governance or Management (Ref: Para. 36)

A145. In applying ISA 260 (Revised), 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.[64] Appendix 2~~3~~ includes matters specific to accounting estimates that the auditor may consider communicating to those charged with governance. [Previously paragraph A155]

A146. ISA 265 requires the auditor to communicate in writing to those charged with governance s~~S~~ignificant deficiencies in internal control ~~relating to accounting estimates may be~~ identified during the audit~~by the auditor and communicated to those charged with governance~~.[65] Such significant deficiencies may include those~~, including~~ related to controls over:~~[66]~~

(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~~ related to the method, assumptions and data used to make the accounting estimate;

(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. [Previously paragraph A156]

A147. 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 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. [Previously paragraph A157]

Documentation (Ref: Para. 37)

A148. ISA 315 (Revised)[67] and ISA 330[68] provide 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~~ in ~~applying~~ ISA 230.[69] I~~i~~n 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 ~~significant professional judgments that form the basis for the auditor's evaluation of whether the accounting estimates and related disclosures are reasonable in the context of the applicable financial reporting framework, or are misstated~~. In addition, the auditor's judgments about the

64 ISA 260 (Revised), paragraph 16(a)

65 ISA 265, paragraph 9

~~66 ISA 265, paragraph 9~~

67 ISA 315 (Revised), paragraphs 32 and A152-A155

68 ISA 330, paragraphs 28 and A63

69 ISA 230, paragraph 8(c)

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. [Previously paragraph A158]

A149. 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 330, this ISA requires that the auditor take into account the reasons given to the risk of material misstatement at the assertion level. Those reasons may relate to the auditor's assessment of inherent risk, or when the auditor plans to rely on controls, a combination of inherent and control risk. When the reasons relate to the auditor's assessment of inherent risk, such reasons may relate to one or more inherent risk factors.

A150. When the auditor's assessment of the risk of material misstatement does not include an expectation that relevant controls are operating effectively, the auditor's documentation of the linkage of the further audit procedures may describe how the substantive audit procedures performed are responsive to reasons for the assessed inherent risk. For example, the auditor's assessment of inherent risk may relate to the subjectivity in the selection of forward-looking data or assumptions and the auditor's substantive audit procedures may involve obtaining evidence from external information sources of acceptable alternatives and performing sensitivity analysis to assess the impact of using those acceptable alternatives. When the auditor's assessment of the risk of material misstatement includes an expectation that relevant controls are operating effectively, the auditor's documentation of the linkage of the further audit procedures may include how the controls that the auditor plans to test, together with planned substantive procedures, address one or more relevant assertions affected by an inherent risk factor(s).

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~~ When~~the degree to which complexity affects~~ the selection and application of methods, ~~significant~~ data or significant assumptions is affected by complexity to a higher degree ~~in making accounting estimates~~, the auditor's ~~significant~~ judgments in determining whether specialized skills or knowledge are required to perform the risk assessment procedures, to design and perform procedures ~~respond~~ responsive to those risks, or to evaluate the audit evidence obtained. In these circumstances, the documentation also may include ~~and, if so,~~ how the required skills or knowledge were applied. [Previously paragraph A158A]

A152. The exercise of professional skepticism in relation to accounting estimates is important when the 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. Paragraph A7 of ISA 230 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 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. ~~documenting evidence of the auditor's exercise of professional skepticism in accordance with the ISAs, in relation to~~

~~accounting estimates, is important when they are subject to a greater degree of estimation uncertainty or affected to greater extent by subjectivity, complexity or other inherent risk factors. Documentation of compliance with certain requirements in this ISA, may provide evidence of the exercise of professional skepticism by the auditor.~~ Examples of other requirements in this ISA for which documentation may provide evidence of the exercise of professional skepticism by the auditor include:

- Paragraph 12(d), regarding ~~in documenting~~ how the auditor has applied an~~its~~ understanding in developing its own expectation of the accounting estimates and related disclosures to be included in the financial statements and how that expectation compares with the ~~draft~~ financial statements prepared by management;
- Paragraph 17, which ~~in documenting how the~~ requires further audit procedures ~~were~~ to be designed and performed to obtain evidence that is not biased toward only audit evidence that is likely to be corroborative and that excludes audit evidence that may be contradictory in nature ~~from relevant sources, including sources that are independent of those used by management~~;
- Paragraphs 22(b), 23(b), 24(b) and 31, which address indicators of possible management bias; and
- Paragraph 33, which addresses the auditor's consideration of audit evidence, whether corroborative or contradictory. [Previously paragraph A158B]

Appendix 1~~2~~

(Ref: Para. 2, 3, 11(c))

Inherent Risk Factors

1. In identifying, assessing and responding to the risks of material misstatement at the assertion level ~~related to~~for an accounting estimate and related disclosures, this ISA 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~~and~~ other inherent risk factors~~, affect the process of making the accounting estimate and depicting it in the financial statements, and therefore may indicate risks of material misstatement~~. ~~Inherent risk factors are characteristics of conditions and events that may indicate susceptibility to misstatement before consideration of controls.~~ [Previously paragraph 1]

2. ~~Paragraphs 2 to 8 of Appendix 1 explain the nature of a measurement basis (as a measurement objective) and how it is used in estimating the required cost or price of an item and determining the related disclosures. They also explain that t~~The measurement basis and the nature, condition and circumstances of the financial statement item give rise to ~~the~~ 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 ~~for relevant valuation attributes~~. The method may be specified by the applicable financial reporting framework, or is selected by management ~~from available options~~, to reflect the ~~best~~ available knowledge about how the relevant valuation attributes would be expected to influence the cost or price of the item on the measurement basis. [Previously paragraph 2]

3. Inherent risk related to an accounting estimate is the susceptibility of an assertion about the accounting estimate to material misstatement ~~that could be material~~, before consideration of relevant~~internal~~ 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~~depicting them~~ in the financial statements. [Previously paragraph 2A]

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 as susceptibility to an inherent lack of precision in measurement ~~(i.e., it is inherent measurement uncertainty)~~. 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 latest~~best~~ available knowledge about cost or price for the item on the relevant measurement basis, using observable data about relevant valuation attributes~~, unless a particular method or information is to be applied~~. [Previously paragraph 4]

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~~ in these circumstances~~. 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~~they~~ 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~~would be~~ sources of potential misstatement rather than estimation uncertainty. [Previously paragraph 4A]

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. [Previously paragraph 4B]

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. [Previously paragraph 19]

Complexity

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

   - There are~~ estimation process is influenced by~~ many~~multiple~~ valuation attributes with many~~multiple~~ 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. [Previously paragraph 8]

9. ~~Such inherent c~~Complexity ~~is often reflected in~~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~~more data~~ sources, or multiple data sets ~~to determine an amount for a valuation attribute or~~ to support the making of an assumption or the application of sophisticated mathematical or statistical concepts. [Previously paragraph 9]

10. The greater the ~~inherent~~ 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:

- Available 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 available 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. [Previously paragraph 9A]

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

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

(c) When c~~C~~ertain types of data are~~may be~~ 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. [Previously paragraph 10]

Subjectivity

12. ~~Inherent s~~Subjectivity (i.e., the subjectivity inherent in the process of making an accounting estimate, before consideration of ~~internal~~ controls) reflects inherent limitations in the knowledge or data reasonably available about valuation attributes~~ and how they would affect an item's price or cost. When availability of such knowledge or data is limited, the range of reasonably possible measurement outcomes is likely to be greater than when they are not limited, because the judgments made by reasonably knowledgeable and independent individuals in selecting the point estimate would likely diverge more~~.

~~13.~~ 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. [Previously paragraph 11 and 13]

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~~but~~ there are various potential sources of data available, 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. [Previously paragraph 14]

14. Making assumptions about future events or conditions involves the use of judgment, the difficulty of which varies with the degree~~extent~~ 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~~extent~~ to which those events or conditions are determinable based on available knowledge, including knowledge of past conditions, events and related outcomes. The lack of precision also contributes to estimation uncertainty, as described above. [Previously paragraph 16]

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. [Previously paragraph 17]

16. However, in other cases, the amounts of cash flows embodied in the rights relating to an asset may be uncertain~~ (for example, the amount of compensation for loss claimed in an ongoing litigation may be highly 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 ~~depending on the creditworthiness of the party against whom the claim is made~~. [Previously paragraph 18]

17. ~~In other cases, i~~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 ~~from which~~ repeating historical patterns ~~of behavior relating to uncertain valuation attributes may be discerned and~~ 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. [Previously paragraph 20]

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. [Previously paragraph 21]

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. [Previously paragraph 22]

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. [Previously paragraph 23]

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~~ of the estimation process~~. 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). [Previously paragraph 24]

22. Developing a ~~depiction of an accounting estimate for inclusion in the ~~financial statements 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 ~~representative of ~~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. [Previously paragraph 25]

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 ~~on achieving a faithful representation of~~ 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. [Previously paragraph 26]

24. When estimation uncertainty is higher, the accounting estimate~~it~~ may involve more valuation attributes and more inter-relationships between them, and therefore more ~~inherent~~ complexity. If so, addressing it using an appropriate method may also involve more complexity in the data used or valuation techniques applied. [Previously paragraph 27]

Appendix 2~~3~~

(Ref: Para. A155)

Communications with Those Charged with Governance

Matters ~~specific to significant accounting estimates~~ that the auditor may consider communicating ~~their views about to~~with those charged with governance ~~include~~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 ~~to be recognized or disclosed in the financial statements,~~ 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~~'s~~ 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 ~~significant~~ data and significant assumptions used by management in making the accounting estimates are appropriate in the context ~~of the requirements~~ 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.