

Preliminary Drafting for Proposed ISA 520 (Revised), *Analytical Procedures*

This Agenda Item includes preliminary drafting for Proposed ISA 520 (Revised). Changes from extant¹ are shown in mark-up in **red font**. The text and paragraphs highlighted in **grey** are carried over from the extant ISA 520 with no modification and will be considered further post December 2025.

For ease of navigation:

- The changes shown in mark-up in **red font** have been referenced (in **green**) to the separate **Agenda Items 5–A to 5–K** (as applicable) where the related matters are discussed.
- Mark-ups shown in **red font** without such a reference, are those matters (as applicable) discussed in **Agenda Item 5–L**, ‘Explanation of Other Changes.’

Introduction

Scope of this ISA

1. This International Standard on Auditing (ISA) deals with the auditor’s use of analytical procedures as substantive procedures (“substantive analytical procedures”). It also deals with the auditor’s responsibility relating to the results of analytical procedures used as risk assessment procedures and to perform analytical procedures near the end of the audit that assist the auditor when forming an overall conclusion on the financial statements.
 - 1A. ISA 315 (Revised 2019)² includes requirements and guidance regarding ~~deals with the use of designing and performing risk assessment procedures~~; these audit procedures include analytical procedures ~~as risk assessment procedures~~.³ Analytical procedures as risk assessment procedures are designed and performed to identify and assess risks of material misstatement, whether due to fraud or error, at the financial statement and assertion level.
 - 1B. ISA 330 includes requirements and guidance regarding the nature, timing and extent of audit procedures in response to assessed risks; these audit procedures may include substantive analytical procedures.⁴ Substantive analytical procedures are designed and performed to detect material misstatements at the assertion level.

Effective Date

2. This ISA is effective for audits of financial statements for periods beginning on or after December 15, 2009.

Objectives

3. The objectives of the auditor are to obtain audit evidence when using analytical procedures: **[Agenda Item 5–E]**

¹ See ISA 520 as published in the IAASB 2025 Handbook (Volume I), including (when applicable) conforming and consequential amendments as a result of revision of other approved ISAs which are not yet effective.

² ISA 315 (Revised 2019), *Identifying and Assessing the Risks of Material Misstatement*, paragraph 14(b)

³ ISA 315 (Revised 2019), *Identifying and Assessing the Risks of Material Misstatement*, paragraph 14(b)

⁴ ISA 330, *The Auditor’s Responses to Assessed Risks*, paragraphs 6 and 18

- (a) As risk assessment procedures;
- (b) As To obtain relevant and reliable audit evidence when using substantive analytical procedures; and
- (c) To design and perform analytical procedures near the end of the audit that assist the auditor when forming an overall conclusion as to whether the financial statements are consistent with the auditor's understanding of the entity.

Definitions

4. For the purposes of the ISAs, the following terms have the meaning attributed below:
- (a) "analytical procedures" – A type of audit procedure that involves an means evaluations of financial information through analysis of plausible relationships among both financial and non-financial information data. Analytical procedures also encompass such investigation as is necessary of identified fluctuations or relationships that are inconsistent with other relevant information or that differ from expected values by a significant amount. (Ref: Para. A1–A3A)
 - (b) Substantive analytical procedures – A substantive procedure that involves a comparison of a sufficiently precise expectation developed by the auditor, based on one or more plausible and predictable relationships among financial or non-financial information, to recorded amounts or amounts derived from recorded amounts to determine whether there is a material misstatement. [Agenda Item 5–D]

Requirements

Results of Analytical Procedures Performed as Risk Assessment Procedures [Agenda Item 5–E]

- 4A. When the results of analytical procedures performed as risk assessment procedures⁵ identify fluctuations or relationships that are inconsistent with other relevant information or that differ from expected results, the auditor shall determine the effects those results have on the identification and assessment of the risks of material misstatement. (Ref: Para. A3B–A3C)

Substantive Analytical Procedures

5. When designing and performing substantive analytical procedures, either alone or in combination with tests of details, as substantive procedures in accordance with ISA 330,⁶ the auditor shall: (Ref: Para. A4–A5A) [Agenda Item 5–E]
- (a) Determine the suitability of particular substantive analytical procedures for given assertions, taking account of the assessed risks of material misstatement and tests of details, if any, for these assertions; (Ref: Para. A6–A11)
 - (b) [Moved to Para. 5(c)(i)]
 - (c) Develop an expectation of recorded amounts or ratios amounts derived from recorded amounts based on one or more plausible and predictable relationships among financial and non-financial information. In developing such an expectation, the auditor shall:
 - (i) Evaluate the reliability of information data from which the auditor's expectation of

⁵ ISA 315 (Revised 2019), paragraph 14(b)

⁶ ISA 330, paragraph 18

~~recorded amounts or ratios~~ is developed, ~~taking account of source, comparability, and nature and relevance of information available, and controls over preparation;~~
(Ref: Para. A12–A13⁴) [Agenda Item 5–E] [Moved from Para. 5(b)]

- (ii) ~~and evaluate~~ Determine whether the expectation is sufficiently precise to identify a misstatement that, individually or when aggregated with other misstatements, may cause the financial statements to be materially misstated; and (Ref: Para. A15–A15B)
- (d) Determine ~~an~~the amount, ~~not exceeding performance materiality,~~⁷ ~~as a basis to evaluate~~ ~~of any difference between the expectation developed by the auditor and the of~~ recorded amounts ~~or amounts derived from recorded amounts from expected values~~ that is acceptable without further investigation ~~of whether a misstatement exists~~ as required by paragraph 5(e)~~7~~; and (Ref: Para. A16) [Agenda Item 5–E]
- (e) If the auditor identifies a difference that exceeds the amount determined in accordance with paragraph 5(d), investigate the difference to determine whether a material misstatement exists. In doing so, the auditor shall: (Ref: Para. A16B–A16D) [Agenda Item 5–E]
- (i) ~~Make inquiries of management, and as appropriate, others within or outside the entity and obtain audit evidence relevant to such responses; and~~ (Ref: Para. A16E)
- (ii) ~~Perform other audit procedures as necessary in the circumstances.~~ (Ref: Para. A16F)

Analytical Procedures that Assist When Forming an Overall Conclusion

6. The auditor shall design and perform analytical procedures near the end of the audit that assist the auditor when forming an overall conclusion as to whether the financial statements are consistent with the auditor's understanding of the entity. (Ref: Para. A17–A19)

Investigating Results of Analytical Procedures

7. If, ~~in performing~~ analytical procedures ~~performed that assist when forming an overall conclusion, the auditor in accordance with this ISA identifies~~⁷ fluctuations or relationships that are inconsistent with other relevant information or that differ ~~significantly~~ from expected ~~results values by a significant amount~~, the auditor shall investigate such differences by ~~making inquiries of management.~~ The auditor shall also obtain audit evidence relevant to management's responses and perform other audit procedures in addition to inquiries as necessary in the circumstances. (Ref: Para. A21A)
- (a) ~~Inquiring of management and obtaining appropriate audit evidence relevant to management's responses; and~~
- (b) ~~Performing other audit procedures as necessary in the circumstances.~~ (Ref: Para. A20–A21)

⁷ ISA 320, *Materiality in Planning and Performing an Audit*, paragraphs 11 and A13

Application and Other Explanatory Material

Definition of Analytical Procedures (Ref: Para. 4)

A1. Analytical procedures include the consideration of comparisons of the entity's financial information with, for example:

- Comparable information for prior periods.
- Anticipated results of the entity, such as budgets or forecasts, or expectations of the auditor, such as an estimation of depreciation.
- Similar industry information, such as a comparison of the entity's ratio of sales to accounts receivable with industry averages or with other entities of comparable size in the same industry.

A2. Analytical procedures also include consideration of relationships, for example:

- Among elements of financial information that would be expected to conform to a predictable pattern based on the entity's experience, such as gross margin percentages.
- Between financial information and relevant non-financial information, such as payroll costs to number of employees.

A3. Various methods may be used to perform analytical procedures. These methods range from performing simple comparisons to performing complex analyses using advanced statistical techniques. Analytical procedures may be applied to consolidated financial statements, components and individual elements of information.

A3A. As explained in ISA 200,⁸ the application of professional skepticism by the auditor includes being alert, for example, to audit evidence that contradicts other audit evidence obtained and to information that brings into question the reliability of documents and responses to inquiries to be used as audit evidence. Designing and performing analytical procedures in an unbiased manner may assist the auditor in identifying potentially contradictory information, which may assist the auditor in exercising professional skepticism.

Results of Analytical Procedures Performed as Risk Assessment Procedures (Ref: Para. 4A) [Agenda Item 5–E]

A3B. The results of analytical procedures may assist the auditor in identifying and assessing risks of material misstatement in accordance with ISA 315 (Revised 2019). For example, the auditor may:

- Become aware of information relating to other areas of the audit where risks of material misstatement had not been previously identified, or of new information that may cause the auditor to revise the identification or assessment of risks of material misstatement.⁹
- Consider how the results of analytical procedures may affect the design of other risk assessment procedures or further audit procedures or refining the design of the analytical procedures.

A3C. In determining the effects of the results of analytical procedures performed as risk assessment

⁸ ISA 200, Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing, paragraph A21

⁹ ISA 315 (Revised 2019), paragraph 37

procedures, the auditor may perform additional risk assessment procedures, for example, making inquiries of management, corroborated through inspection or observation. These additional risk assessment procedures may assist the auditor in refining initial expectations of risk.¹⁰

Example:

An auditor may perform analytical procedures by comparing current year revenue to prior periods and industry trends. If revenue has increased significantly while cost of sales or receivables remain unchanged, this may indicate that a risk of material misstatement in revenue recognition exists. To refine the auditor's initial expectations of the risks of material misstatement the auditor may conduct inquiries of management to understand the reasons behind the significant or unusual fluctuations, inconsistencies or differences, such as changes in pricing strategy, customer mix, or billing practices.

Substantive Analytical Procedures (Ref: Para. 5)

- A4. The auditor's substantive procedures at the assertion level may be tests of details, substantive analytical procedures, or a combination of both. The decision about which audit procedures to perform, including whether to use substantive analytical procedures, is based on the auditor's judgment about the expected effectiveness and efficiency of the available audit procedures to reduce audit risk at the assertion level to an acceptably low level.
- A5. The auditor may inquire of management as to the availability and reliability of information needed to apply substantive analytical procedures, and the results of any such analytical procedures performed by the entity. It may be effective to use analytical data prepared by management, provided the auditor is satisfied that such data is properly prepared.

Obtaining Audit Evidence in an Unbiased Manner (Ref: Para. 5)

A5A. ISA 330 (Revised)¹¹ requires the auditor to respond to the risks of material misstatement in a manner that is not biased towards obtaining audit evidence that may be corroborative or towards excluding audit evidence that may be contradictory. Designing and performing substantive analytical procedures to obtain audit evidence in an unbiased manner may involve, for example, avoiding using more readily available information, such as information derived from recorded amounts when developing an expectation of recorded amounts.

Suitability of Particular Analytical Procedures for Given Assertions (Ref: Para. 5(a))

- A6. Substantive analytical procedures are generally more applicable to large volumes of transactions that tend to be predictable over time. The application of planned analytical procedures is based on the expectation that relationships among data exist and continue in the absence of known conditions to the contrary. However, the suitability of a particular analytical procedure will depend upon the auditor's assessment of how effective it will be in detecting a misstatement that, individually or when aggregated with other misstatements, may cause the financial statements to be materially misstated.
- A7. In some cases, even an unsophisticated predictive model may be effective as an analytical procedure. For example, where an entity has a known number of employees at fixed rates of pay

¹⁰ ISA 315 (Revised 2019), paragraph 7

¹¹ Proposed ISA 330 (Revised), paragraph 6A

throughout the period, it may be possible for the auditor to use this data to estimate the total payroll costs for the period with a high degree of accuracy, thereby providing audit evidence for a significant item in the financial statements and reducing the need to perform tests of details on the payroll. The use of widely recognized trade ratios (such as profit margins for different types of retail entities) can often be used effectively in substantive analytical procedures to provide evidence to support the reasonableness of recorded amounts.

- A8. Different types of analytical procedures provide different levels of assurance. Analytical procedures involving, for example, the prediction of total rental income on a building divided into apartments, taking the rental rates, the number of apartments and vacancy rates into consideration, can provide persuasive evidence and may eliminate the need for further verification by means of tests of details, provided the elements are appropriately verified. In contrast, calculation and comparison of gross margin percentages as a means of confirming a revenue figure may provide less persuasive evidence, but may provide useful corroboration if used in combination with other audit procedures.
- A9. The determination of the suitability of particular substantive analytical procedures is influenced by the nature of the assertion and the auditor's assessment of the risk of material misstatement. For example, if controls over sales order processing are deficient, the auditor may place more reliance on tests of details rather than on substantive analytical procedures for assertions related to receivables.
- A10. Particular substantive analytical procedures may also be considered suitable when tests of details are performed on the same assertion. For example, when obtaining audit evidence regarding the valuation assertion for accounts receivable balances, the auditor may apply analytical procedures to an aging of customers' accounts in addition to performing tests of details on subsequent cash receipts to determine the collectability of the receivables.

Considerations Specific to Public Sector Entities

- A11. The relationships between individual financial statement items traditionally considered in the audit of business entities may not always be relevant in the audit of governments or other non-business public sector entities; for example, in many public sector entities there may be little direct relationship between revenue and expenditure. In addition, because expenditure on the acquisition of assets may not be capitalized, there may be no relationship between expenditures on, for example, inventories and fixed assets and the amount of those assets reported in the financial statements. Also, industry data or statistics for comparative purposes may not be available in the public sector. However, other relationships may be relevant, for example, variations in the cost per kilometer of road construction or the number of vehicles acquired compared with vehicles retired.

The Reliability of the Information Data (Ref: Para. 5(c)(i)) [Agenda Item 5–E]

- A12. Proposed ISA 500 (Revised) establishes requirements and provides guidance for evaluating whether the information intended to be used as audit evidence is reliable.¹² In evaluating the reliability of information from which the auditor's expectation is developed~~The reliability of data is influenced by its source and nature and is dependent on the circumstances under which it is obtained. Accordingly, the following are relevant when determining whether data is reliable for~~

¹² Proposed ISA 500 (Revised), paragraphs 9–10B

~~purposes of designing substantive analytical procedures, the auditor may consider matters such as:~~

- ~~(a) Source of the information available.~~ For example, information may be more reliable when it is obtained from independent sources outside the entity.¹³
- ~~(b) Comparability of the information available.~~ For example, broad industry data may need to be supplemented to be comparable to that of an entity that produces and sells specialized products.¹³
- ~~(c) Nature and availability relevance of the information available.~~ For example, whether budgets have been established as results to be expected rather than as goals to be achieved;¹³ and
- ~~(d) Controls over the preparation of the information that are designed to ensure its completeness, accuracy and validity.~~ For example, controls over the preparation, review and maintenance of budgets (also see paragraph A13).

~~Such~~The matters may be discussed in paragraphs A12(a)–A12(d) are relevant irrespective of whether the auditor performs substantive analytical procedures on the entity's period-end financial statements, or at an interim date and plans to perform substantive analytical procedures for the remaining period. ISA 330 establishes requirements and provides guidance on substantive procedures performed at an interim date.¹⁴

[Moved from Para. A14]

- A13. Proposed ISA 500 (Revised) requires the auditor to test the operating effectiveness of controls that support the integrity of information, including general IT controls, when the auditor determines that the reliability of such information depends on the continued operating effectiveness of those controls or to perform other audit procedures to evaluate the reliability of such information.¹⁵ ~~The auditor may consider testing the operating effectiveness of controls, if any, over the entity's preparation of information used by the auditor in performing substantive analytical procedures in response to assessed risks.~~ When such controls are effective, the auditor generally has greater confidence in the reliability of the information and, therefore, in the results of substantive analytical procedures. The operating effectiveness of controls over non-financial information may often be tested in conjunction with other tests of controls.

Example:

~~For example, in~~ In establishing controls over the processing of sales invoices, an entity may include controls over the recording of unit sales. In these circumstances, the auditor may test the operating effectiveness of controls over the recording of unit sales in conjunction with tests of the operating effectiveness of controls over the processing of sales invoices. Alternatively, the auditor may consider whether the information was subjected to other audit procedures to evaluate the reliability of such information audit testing. ~~ISA 500 establishes requirements and provides guidance in determining the audit procedures to be performed on the information to be used for substantive analytical procedures.~~¹⁶

¹³ ISA 500, *Audit Evidence*, paragraph A35

¹⁴ ISA 330, paragraphs 22–23

¹⁵ Proposed ISA 500 (Revised), paragraph 10B

¹⁶ ISA 500, paragraph 10

A14. **[Moved to Para. A12]**

~~*Evaluation—Determining Whether the Expectation Is Sufficiently Precise*~~ (Ref: Para. 5(c)(ii))

A15. Proposed ISA 500 (Revised) establishes requirements and guidance for evaluating whether the information intended to be used as audit evidence is relevant and sets out factors that may affect the relevance of such information.¹⁷ For a substantive analytical procedure, the level of detail of the information needed to meet the intended purpose of the audit procedure is a necessary consideration when developing a sufficiently precise expectation of recorded amounts or amounts derived from recorded amounts. As required by paragraph 5(c), a sufficiently precise expectation is based on identifying one or more plausible and predictable relationships among financial or non-financial information with this relationship expected to continue in the absence of known conditions to the contrary.

A15A. Matters relevant to the auditor's evaluation of whether the expectation can be developed sufficiently precisely to identify a misstatement that, when aggregated with other misstatements, may cause the financial statements to be materially misstated, include:

- The accuracy with which the expected results of substantive analytical procedures can be predicted.

Example:

~~For example, the auditor may expect greater consistency in comparing gross profit margins from one period to another than in comparing discretionary expenses, such as research or advertising. The auditor may develop an expectation of the amount of the entity's interest expense for the period, based on the relationship between the principal amount of the entity's borrowing facility and applicable interest rates during the period, that is sufficiently precise.~~

- The degree to which information can be disaggregated.

Example:

~~For example, s~~Substantive analytical procedures may be more effective when applied to financial information on individual sections of an operation or to financial statements of components of a diversified entity, than when applied to the financial statements of the entity as a whole.

- The availability of ~~the~~ information, both financial and non-financial, including how external factors may affect such information. If the information is available, the auditor is required to evaluate ~~may also consider~~ the reliability of the information as discussed in paragraphs A12–A13 above.

Examples:

~~For example, t~~The auditor may consider:

- ~~w~~Whether financial information, such as budgets or forecasts, and non-financial information, such as the number of units produced or sold, is available to design

¹⁷ Proposed ISA 500 (Revised), paragraph 9 and A54–A55

substantive analytical procedures.

- Whether external factors, such as general economic conditions, changes in interest rates or industry trends affect financial or non-financial information.

A15B. The auditor may use technological tools when designing and performing substantive analytical procedures to assist in developing an expectation that is more precise.

Examples:

The auditor may use technological tools such as:

- Artificial intelligence, to extract and analyze unstructured data from industry reports obtained directly by the auditor from external sources. By transforming the data into structured information and analyzing factors such as market growth rates, competitor performance, and pricing trends.
- A machine learning program, to analyze the entity's historical monthly revenue and cost of sales information and identify a predictable relationship between revenue and cost of sales. By incorporating variables, such as seasonal trends, changes in pricing and volumes of goods sold, the technological tools may enable the auditor to develop a more precise expectation of the current period's cost of sales relative to revenue.

Amount of Difference ~~Between the Auditor's Expectation and of Recorded Amounts or Amounts Derived from Recorded Amounts from Expected Values~~ that Is Acceptable (Ref: Para. 5(d)) [Agenda Item 5–E]

A16. ~~The auditor's determination of the amount of difference from the expectation that can be accepted without further investigation is influenced by materiality¹⁸ and the consistency with the desired level of assurance, taking account of the possibility that a misstatement, individually or when aggregated with other misstatements, may cause the financial statements to be materially misstated.~~ ISA 330 requires the auditor to plan to obtain more persuasive audit evidence the higher the auditor's assessment of inherent risk on the spectrum of inherent risk.¹⁹ Accordingly, as the assessed risk increases, the amount of difference between the auditor's expectation and recorded amounts or amounts derived from recorded amounts considered acceptable without further investigation of whether a misstatement exists decreases in order to achieve the desired level of persuasive audit evidence.²⁰

Investigating Results of Substantive Analytical Procedures (Ref: Para. 5(e)) [Agenda Item 5–E]

A16B. A difference exceeding the amount that is acceptable without further investigation ordinarily indicates a misstatement. ISA 450 requires the auditor to consider both the size and the nature of a misstatement, and the particular circumstances of its occurrence, when evaluating whether the misstatement is material.²¹

¹⁸ ~~ISA 320, *Materiality in Planning and Performing an Audit*, paragraph A14~~

¹⁹ ~~ISA 330, paragraph 7(c)~~

²⁰ ~~ISA 330, paragraph A19~~

²¹ ISA 450, *Evaluation of Misstatements Identified during the Audit*, paragraph 11(a). Paragraph A21 of ISA 450 provides guidance on the circumstances that may affect the evaluation of a misstatement.

A16C. The following are examples of audit procedures that the auditor may perform to investigate a difference between the auditor's expectation and the recorded amounts or amounts derived from recorded amounts:

Examples:

- In testing an entity's interest expense, the auditor may develop an expectation based on the principal amounts and applicable interest rates of the entity's bank loans. If a decrease in interest expense is attributed to the redemption of a bank loan during the period, the auditor may inspect supporting documents, such as the proof of loan payment, or independently confirm the payoff with the bank.
- In testing an entity's product sales, the auditor may develop an expectation based on quantity of products sold and the unit price. If a monthly sales increase has resulted from an unusually large, one-time sales contract modification, the auditor may inspect supporting documents, such as amendments to the sales contract and related shipping reports, or independently confirm the sales contract amendment with the customer.

A16D. When investigating the differences, the auditor may obtain new information of which the auditor was not aware when developing the auditor's expectation of the recorded amounts. In such circumstances, the auditor may revise the identification or assessment of the risks of material misstatement,²² modify the design of the substantive analytical procedures or perform other substantive procedures to determine whether there is a misstatement.

A16E. Audit evidence relevant to management's responses, or the responses of others, comprises both information that supports and corroborates such responses, and any information that contradicts such responses. Proposed ISA 500 (Revised) requires the auditor to design and perform audit procedures in a manner that is not biased towards obtaining audit evidence that may be corroborative, or towards excluding audit evidence that may be contradictory.²³

A16F. The need to perform other audit procedures may arise when, for example, management is unable to provide an explanation, or the explanation, together with the audit evidence obtained relevant to management's response, is not considered adequate.

[Moved from Para. A21]

Analytical Procedures that Assist When Forming an Overall Conclusion (Ref: Para. 6)

A17. The conclusions drawn from the results of analytical procedures designed and performed in accordance with paragraph 6 are intended to corroborate conclusions formed during the audit of individual components or elements of the financial statements. This assists the auditor to draw reasonable conclusions on which to base the auditor's opinion.

A18. [Moved to Para. A21B]

A19. The analytical procedures performed in accordance with paragraph 6 may be similar to those that would be used as risk assessment procedures.

²² ISA 315 (Revised 2019), paragraph 37

²³ Proposed ISA 500 (Revised), paragraph 8(a)

Investigating Results of Analytical Procedures that Assist When Forming an Overall Conclusion (Ref: Para. 7)

~~A20. Audit evidence relevant to management's responses may be obtained by evaluating those responses taking into account the auditor's understanding of the entity and its environment, and with other audit evidence obtained during the course of the audit.~~

A21. [Moved to Para. A16F]

A21A. In the case of analytical procedures performed near the end of the audit that assist the auditor when forming an overall conclusion, the need to perform other audit procedures may arise when, for example, management responses are inconsistent with the auditor's knowledge obtained in the audit or is not considered adequate. The results of such analytical procedures together with management's responses to the auditor's inquiries may also identify a previously unrecognized risk of material misstatement. In such circumstances, ISA 315 (Revised 2019) requires the auditor to revise the auditor's assessment of the risks of material misstatement and modify the further planned audit procedures accordingly.²⁴

[Moved from Para. A18]

²⁴ ISA 315 (Revised 2019), paragraph 37