



Materiality considerations for attestation engagements

involving aspects of subject matters that
cannot be quantitatively measured



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Introduction

CPAs have been issuing reports related to financial statements for more than 100 years. In response to the profession's evolution to issuing reports related to subject matters other than historical financial statements or elements thereof, the AICPA issued the first attestation standards in the 1980s to provide guidance to practitioners for performing engagements involving other subject matters. Some of those engagements may present unique challenges to practitioners because of the nature of the subject matters.

Attestation engagements can be performed on a variety of subject matters, and not all aspects of those subject matters can be quantitatively measured or evaluated. For example, when a practitioner performs a review engagement of a narrative presentation of an entity's sustainability information, some aspects of that presentation lend themselves to quantitative measurement (for example, greenhouse gas [GHG] emissions or barrels of oil used), whereas others do not (for example, competence and education of employees or fair labor practices). When aspects of the subject matter are not quantitatively measurable, practitioners may be faced with the challenge of how to consider materiality when planning, performing and reporting in these engagements.

To assist practitioners with this challenge, the AICPA established, through its Assurance Services Executive Committee (ASEC), the Materiality Working Group (working group) to assess how practitioners consider materiality in examination and review attestation engagements involving aspects of subject matters that cannot be quantitatively measured and then develop nonauthoritative guidance to assist practitioners with making professional judgments regarding materiality in such examination and review engagements. After exposure for public comment in a discussion paper issued in August 2019 and with the working

group's assistance, the AICPA staff has prepared this nonauthoritative guidance to highlight the challenges that practitioners may face when making professional judgments about materiality in such engagements and to provide its views on the ways in which practitioners might address those challenges. This nonauthoritative guidance represents the views of the working group and the AICPA staff. This publication is not approved, disapproved or otherwise acted on by the Auditing Standards Board, the membership, or the governing body of the AICPA and is not an official pronouncement of the AICPA.

This document does not address how to determine whether criteria to be used to evaluate the subject matter in an attestation engagement are suitable for the engagement. Rather, when the term criteria is used in this document, it is assumed the practitioner has already determined the criteria to be suitable and available to intended users as required by AT-C section 105, *Concepts Common to All Attestation Engagements*.¹ Sometimes, the criteria to be used to evaluate the subject matter in an attestation engagement include a discussion of materiality in the context of the preparation and presentation of the subject matter. If that is the case, the criteria may provide a frame of reference for the practitioner's consideration of materiality in the engagement.

This document includes relevant guidance issued up to and including Statement on Standards for Attestation Engagements No. 20, *Amendments to the Description of the Concept of Materiality*.

¹ All AT-C sections can be found in *AICPA Professional Standards*.

The Challenges of Determining Materiality in an Attestation Engagement Involving Aspects of Subject Matters That Cannot be Quantitatively Measured

1. Materiality considerations affect engagement planning, engagement performance, and ultimately, the practitioner's report. In an examination engagement, the practitioner expresses an opinion about whether the subject matter is in accordance with (or based on) the criteria, in all material respects;² in a review engagement, the practitioner expresses a conclusion about whether the practitioner is aware of any material modifications that should be made to the subject matter for it to be in accordance with the criteria.³
2. In an attestation engagement, the attestation standards define a *misstatement* as "the difference between the measurement or evaluation of the subject matter by the responsible party and the proper measurement or evaluation of the subject matter based on the criteria."⁴ Misstatements (including omissions) can be intentional or unintentional, qualitative or quantitative. In certain engagements, a misstatement may be referred to as a *deviation*, *deficiency*, *exception* or *instance of noncompliance*. In general, misstatements, including omissions, are considered to be material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by intended users based on the subject matter.⁵
3. Considering materiality when misstatements in certain aspects of the subject matter cannot be quantified is typically more difficult and less straightforward than when misstatements in subject matters can be quantified. In an audit engagement, for example, the subject matter is the historical financial statements or an element thereof. Misstatements in financial statement amounts can be quantified. Generally accepted auditing standards provide guidance on an auditor's evaluation of misstatements in historical financial statements using both quantitative and qualitative factors. When auditing financial statement amounts, many auditors set materiality by choosing a benchmark, such as net income, revenues or net assets, and applying a specific percentage to the benchmark (for example, 5% of net income) selected based on consideration of various factors.
4. Misstatements in disclosures that accompany historical financial statements are not always quantitatively measurable (for example, the nature and extent of disclosures about related parties). Depending on the disclosure, an auditor assessing misstatements in such disclosures may consider primarily qualitative factors.
5. Attestation engagements can be performed on a variety of subject matters, and many aspects of those subject matters cannot be quantitatively measured or evaluated. Subject matters of commonly performed attestation engagements include the following:
 - Description of a system and controls of a service organization, when those controls are relevant to user entities' internal control over financial reporting (in a SOC 1[®] examination)

² Paragraph .03b of AT-C section 205, *Examination Engagements*. This paragraph also acknowledges that a practitioner may also express an opinion on whether the responsible party's assertion is fairly stated, in all material respects.

³ Paragraph .03b of AT-C section 210, *Review Engagements*. This paragraph also acknowledges that a practitioner may also express a conclusion on whether the practitioner is aware of any material modifications that should be made to the responsible party's assertion in order for it to be fairly stated.

⁴ Paragraph .10 of AT-C section 105, *Concepts Common to All Attestation Engagements*.

⁵ Paragraph .A17 of AT-C section 205 and paragraph .A16 of AT-C section 210.



- Description of a system and controls of a service organization relevant to security, availability, processing integrity, confidentiality or privacy (in a SOC 2[®] examination)
 - Information about sustainability matters, such as economic, environmental, social and governance performance, presented in various ways, such as in a sustainability report, in a schedule or statement of GHG emissions information or as a presentation of one or more sustainability indicators or sustainability metrics (in a review or examination of sustainability information)
 - Compliance with the terms of a contract, law or regulation (in a compliance examination)
6. Only certain aspects of those subject matters lend themselves to quantitative measurement or evaluation (for example, percentage of system downtime, metric tons of GHG emissions, number of instances of noncompliance); many other aspects do not (for example, the nature and extent of disclosures about an entity's sustainability efforts, disclosures included in a description of an entity's internal control system or instances of noncompliance). Such subject matters may present challenges for practitioners when considering materiality in these engagements.
 7. Because the attestation standards were written to be applicable to a wide variety of subject matters, they do not provide detailed guidance on considering materiality for specific subject matters. This document focuses on the challenges surrounding materiality considerations when aspects of such subject matters cannot be quantified.

Requirements of the Attestation Standards

8. In both examination and review engagements, the practitioner is required to consider materiality when planning, performing and reporting on the engagement. For an examination engagement, the practitioner is required to do the following:

- Consider materiality for the subject matter when establishing an overall engagement strategy.⁶
- Reconsider materiality for the subject matter if the practitioner becomes aware of information during the engagement that would have caused the practitioner to have initially determined a different materiality.⁷
- Identify and assess the risks of material misstatement as the basis for designing and performing further procedures whose nature, timing, and extent are responsive to the assessed risks of material misstatement and allow the practitioner to obtain reasonable assurance about whether the subject matter is in accordance with (or based on) the criteria, in all material respects.⁸
- Form an opinion about whether the subject matter is in accordance with (or based on) the criteria, in all material respects. When forming that opinion, the practitioner should evaluate.
 - the practitioner's conclusion regarding the sufficiency and appropriateness of evidence obtained and
 - whether uncorrected misstatements are material, individually or in the aggregate.⁹

For a review engagement, the practitioner is required to consider materiality when doing the following:

- Determining the nature, timing and extent of procedures.
 - Forming a conclusion about whether the practitioner is aware of any material modifications that should be made to the subject matter in order for it to be in accordance with (or based on) the criteria. When forming that conclusion, the practitioner should evaluate
 - the practitioner's conclusion regarding the sufficiency and appropriateness of the review evidence obtained; and
 - whether uncorrected misstatements are material, individually or in the aggregate.¹⁰
9. A practitioner's professional judgments about materiality are made in light of engagement facts and circumstances, but they are not affected by the level of assurance; that is, for the same intended users, materiality for an examination engagement is the same as it is for a review engagement because materiality is based on the information needs of intended users and not on the level of assurance.¹¹

⁶ Paragraph .16 of AT-C section 205.

⁷ Paragraph .17 of AT-C section 205.

⁸ Paragraph .18 of AT-C section 205.

⁹ Paragraph .59 of AT-C section 205.

¹⁰ Paragraphs .14 and .42 of AT-C section 210.

¹¹ Paragraph .A16 of AT-C section 205 and paragraph .A15 of AT-C section 210.

Requirements and Guidance in Subject-Matter-Specific Attestation Standards

10. Requirements and guidance related to materiality included in applicable subject-matter-specific attestation standards need to be considered when making judgments about materiality in those subject-specific attestation engagements. The following subject-matter-specific standards include requirements and guidance that, adapted as necessary, may assist practitioners when considering materiality in attestation engagements on other subject matters:

- AT-C section 305, *Prospective Financial Information*, provides guidance on materiality in prospective financial statement engagements.
- AT-C section 315, *Compliance Attestation*, provides guidance on materiality in examinations of an entity's compliance with specified requirements.
- AT-C section 320, *Reporting on an Examination of Controls at a Service Organization Relevant to User Entities' Internal Control Over Financial Reporting*, provides requirements and guidance on materiality in SOC 1® examinations.
- AT-C section 395, *Management's Discussion and Analysis*, provides requirements for considering materiality when planning and performing engagements on management's discussion and analysis.

Practitioner's Perception of the Common Information Needs of Intended Users as a Group

11. The attestation standards state that the practitioner's consideration of materiality is a matter of professional judgment and is affected by the practitioner's perception of the common information needs of intended users as a group.¹² In this context, the practitioner may assume that intended users:
 - a. have a reasonable knowledge of the subject matter and a willingness to study the subject matter with reasonable diligence.
 - b. understand that the subject matter is measured or evaluated, and examined or reviewed, to appropriate levels of materiality and have an understanding of any materiality concepts included in the criteria.
 - c. understand any inherent uncertainties involved in measuring or evaluating the subject matter.
 - d. make reasonable judgments based on the subject matter.¹³
12. The attestation standards do not provide further guidance about what constitutes a practitioner's perception of the common information needs of intended users. For this reason, there are often differing views about what actions, if any, need to be taken to inform a practitioner's perception of the common information needs of intended users as a group.
13. Understanding what to do to inform this perception is further complicated by the nature of attestation engagements. In an audit of historical financial statements, understanding the primary intended users and the decisions they make based on financial statements is usually well understood. FASB Concepts Statement No. 8, *Conceptual Framework for Financial Reporting*, identifies investors, lenders, and other creditors, as a group, as the primary users of financial statements prepared in accordance with standards promulgated by FASB.
14. As discussed in paragraph 5, however, attestation engagements are performed on a broad array of subject matters; because of this diversity, it is not always possible to identify intended users as a group for all attestation engagements. In addition, for any given subject matter, there may be a variety of intended user groups, and the types of decisions they make based on the subject matter may vary widely.
15. The attestation standards do not require a practitioner to identify intended users in a general-use report. However, when an attestation report is restricted to specified parties, the attestation standards require, among other things, that the practitioner identify, in a separate paragraph of the practitioner's report, the specified parties for whom use of the report is intended, either by naming them, referring to a list of those parties, or identifying the classes of parties.¹⁴ While discussing the identities of the specified parties with management, a practitioner may also obtain an understanding of the types of decisions such specified parties are likely to make based on the subject matter.¹⁵

¹² Paragraph .A17 of AT-C section 205 and paragraph .A16 of AT-C section 210.

¹³ Paragraph .A17 of AT-C section 205 and paragraph .A16 of AT-C section 210.

¹⁴ Paragraphs .65 and .A98 of AT-C section 205 and paragraphs .48 and .A77 of AT-C section 210.

¹⁵ The term *management* is used in this paper to mean the responsible party.

16. The attestation standards also do not require a practitioner to perform specific procedures to inform the practitioner's perception of the common information needs of intended users; however, understanding intended users and how they are likely to make relevant business decisions based on the subject matter may assist the practitioner in making professional judgments about materiality throughout the engagement. The attestation standards clarify that, unless the engagement has been designed to meet the particular information needs of specific users, the possible effect of misstatements on specific users, whose information needs may vary widely, is not ordinarily considered.¹⁶
17. When informing the perception of the common information needs of intended users as a group, the practitioner may do one or a combination of the following:
- Discuss the purpose of the attestation engagement, intended users of the report and the types of decisions those users are likely to make based on the subject matter with management (or the engaging party, if different) during engagement acceptance. Often, management has considered such factors when preparing the subject matter; for example, when preparing a sustainability report in accordance with the Global Reporting Initiative Standards, management is required to identify stakeholder groups with whom the organization engaged and consider their informational needs about key economic, social and environmental topics. In some cases, management may also be aware of intended users' specific expectations about materiality; if so, they can also share that information with the practitioner.
 - Consider previous knowledge obtained about intended users when performing attestation engagements on similar subject matters.
 - Consider whether information about certain aspects of the subject matter presentation is likely to be more important to intended users.
 - Consider information included in criteria, such as information about intended users and the types of decisions they are likely to make based on the subject matter. For example, in a SOC 2 examination, AICPA *Guide Reporting on an Examination of Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality, or Privacy* (SOC 2®) and DC section 200, *Description Criteria for a Description of a Service Organization's System in a SOC 2® Report*,¹⁷ discuss proposed intended users and the ways in which they are likely to use the information in the SOC 2 report when making relevant decisions.

¹⁶ Paragraph .A17 of AT-C section 205.

¹⁷ All DC sections can be found in AICPA *Description Criteria*.

Materiality Considerations During Planning

18. The practitioner is required to exercise professional judgment and maintain professional skepticism when planning and performing an attestation engagement, including when considering materiality for the engagement.¹⁸ The practitioner should consider materiality when establishing the overall examination strategy or when planning and performing the review engagement.¹⁹ The practitioner's consideration of materiality — both quantitatively and qualitatively — during planning affects the nature, timing and extent of procedures to be performed. The following paragraphs discuss some of the unique challenges that practitioners may face and present thoughts that may assist practitioners performing these types of engagements.

Identifying and Evaluating Aspects of Subject Matter That Cannot Be Quantitatively Measured

19. When the subject matter of an attestation engagement is a narrative presentation (for example, a description of a system in a SOC 2[®] examination), certain aspects of the presentation can be quantitatively measured, whereas others cannot be quantitatively measured.²⁰ For those aspects that cannot, other ways to identify and evaluate misstatements in the presentation are necessary. For instance, a practitioner may determine that misstatements in a narrative presentation consist of one or more of the following:

- Omission of disclosures required by criteria (for example, inadequate or incomplete disclosures)

- Misstatements of fact
- Changes to disclosures made in a previous period without reasonable justification
- Inclusion of misleading or inappropriate information (for example, information that obscures the disclosures required by the criteria such as excessive or irrelevant disclosures)

20. In a SOC 2[®] examination that addresses privacy, for example, management's failure to describe a principal commitment involving compliance with the European Union's General Data Protection Regulation would be a misstatement by omission. Because such information could reasonably be expected to influence the decisions of intended users, the practitioner may conclude that the omission of such information is material to the description.

21. A practitioner may consider the following to identify and evaluate misstatements in a narrative presentation:
- a. Any expectations the practitioner may have related to the content of the subject matter presentation, based on the practitioner's understanding of the subject matter and the disclosures required by the criteria. In a SOC 2[®] examination, for example, the practitioner would expect the description of a service organization's system to include appropriate disclosures required by the criteria. If a subservice organization's controls are necessary — alone or in combination with the service organization's

¹⁸ Paragraphs .43 and .45 of AT-C section 105.

¹⁹ Paragraph .16 of AT-C section 205 and paragraph .14 of AT-C section 210.

²⁰ As used in this document, the *aspects of the subject matter* can be considered similar to elements of the financial statements (such as assets, liabilities, income, or expenses), which are the economic phenomena to which criteria are applied in preparing the financial statements. For nonfinancial subject matter engagements, aspects of the subject matter may be very diverse and include, for example, natural resources, employees, customer relationships, the entity's strategy or the entity's governance, management, risk management, and internal controls (for example, logical or physical security controls).

controls — for a service organization to achieve its service commitment and system requirements (that is, its system objectives) based on the applicable trust services criteria, and the service organization elects to use the inclusive method, the practitioner would expect to see the subservice organization's controls disclosed in the description. In addition, the practitioner would consider the appropriateness of the nature and extent of related disclosures based on the significance (that is, the importance or the materiality) of the subservice organization's controls to the achievement of the service organization's system objectives.

b. Qualitative factors (refer to the following section for a more detailed discussion of qualitative factors).

c. Whether disclosures about certain aspects of the subject matter are likely to be more important to intended users than other disclosures. Examples include the following:

i. Recent national media coverage about the scarcity of replacement airbags may cause the practitioner to question an auto manufacturer's ability to meet its availability commitments to customers. Therefore, the practitioner may consider criteria-required disclosures related to availability as more significant to intended users than criteria-required disclosures related to other categories addressed by the SOC 2® report (for example, commitments made to customers about confidentiality).

ii. Because personal health information (PHI) is frequently targeted by hackers, the practitioner may consider criteria-required disclosures related to security included in a report on the entity's security, availability and privacy controls likely to be more significant to intended users of the report when the report is for a manufacturer of medical devices that uses PHI than when the report is for a wholesaler of surgical garments.

22. A draft of a narrative presentation that contains misstatements (such as omissions of certain disclosures that the practitioner expected or insufficient or inappropriate disclosures about matters required by the criteria) may prompt the practitioner to discuss the misstatements with management. This discussion ordinarily would be held as early as possible to enable management to revise the narrative presentation, if such revisions are determined to be necessary. In addition, the misstatements in the draft may cause the practitioner to conclude that it will be necessary to obtain more persuasive evidence about one or more of the significant disclosures identified during planning to determine whether the nature and extent of related disclosures in the final subject matter presentation are appropriate. Considerations about the need to obtain more persuasive evidence may be affected by the practitioner's judgment about whether the misstatements are due to fraud or due to error.

Considering Materiality for Aspects of Subject Matter That Can Be Quantitatively Measured

23. Even when the subject matter of an attestation engagement is primarily nonfinancial, such as a narrative presentation or an examination of internal control, certain aspects of the subject matter may be quantitatively measured. For example, when evaluating control effectiveness in an internal control examination, the number of control deviations (which could be the result of a control deficiency) can often be quantified.²¹ In some internal control examinations, the practitioner may be able to make scoping decisions based on quantitative factors. For example, when planning the scope of a SOC 1 examination for a medical claims processor, a practitioner may conclude that the data input process for manual claims is immaterial when those manual claims represent less than 2% of total claims processed by the service organization and the manual claims are considered to be evenly dispersed across the user organizations.²²

24. In an internal control examination, a practitioner may consider materiality during planning by following a process such as the following:

a. Identifying the risks that threaten the achievement of the entity's system objectives

b. Assessing the likelihood and magnitude of the risks identified in (a) that threaten the achievement of the entity's system objectives

c. Understanding the processes and controls the entity has designed, implemented and operated to mitigate the risks identified in (a) to an acceptable level based on the control criteria

d. Using the information obtained in steps (a) through (c) to do the following:

i. Design procedures that focus on controls necessary to mitigate the risks identified in (a) that threaten the achievement of the entity's system objectives.

ii. Develop a materiality threshold for evaluating control deviations. Although there is no requirement in the attestation standards to develop a threshold below which deviations would be considered immaterial, doing so may assist a practitioner in the development of appropriate procedures and in the evaluation of the results of the procedures.

²¹ Despite the fact that the practitioner may be able to quantitatively measure certain aspects of the subject matter in an internal control examination, the practitioner's conclusions about the effectiveness of controls is usually driven more by the effect of identified deviations on the achievement of the entity's system objectives than on the number of identified deviations.

²² AT-C section 320, *Reporting on an Examination of Controls at a Service Organization Relevant to User Entities' Internal Control Over Financial Reporting*, establishes requirements and application guidance for an examination of controls at a service organization that are likely to be relevant to user entities' internal control over financial reporting, which is known as a SOC 1® examination.

Consideration of Qualitative Factors

25. A variety of qualitative factors may be considered when planning and performing the engagement and evaluating the materiality of a misstatement. The attestation standards list the following factors, which may be considered regardless of the subject matter:²³

- The interaction among, and relative importance of, various aspects of the subject matter, such as numerous performance indicators
- The wording chosen regarding subject matter that is expressed in narrative form, for example, the wording chosen does not omit or distort the information
- The characteristics of the presentation adopted for the subject matter when the criteria allow for variations in that presentation
- The nature of a misstatement, for example, the nature of observed deviations in the operation of a control when the responsible party asserts that the control is effective
- Whether a misstatement affects compliance with laws or regulations
- In the case of periodic reporting on a subject matter, whether the effect of an adjustment affects past or current information about the subject matter or is likely to affect future information about the subject matter
- Whether a misstatement is the result of an intentional act or is unintentional

- Whether a misstatement is significant regarding the practitioner's understanding of known previous communications to users, for example, in relation to the expected outcome of the measurement or evaluation of the subject matter
- Whether a misstatement relates to the relationship between the responsible party and, if different, the engaging party or its relationship with other parties

In addition to these factors, depending on the subject matter of the engagement, the inherent uncertainty of the subject matter may also be considered.

26. The practitioner may consider one or more of these factors during planning and performance. During planning, for example, the practitioner may discuss the relevance of qualitative factors with management as part of the practitioner's consideration of materiality. The following paragraphs present examples of how some of these qualitative factors may affect the practitioner's consideration of materiality for certain aspects of subject matters that are not quantitatively measurable. The examples assume that the criteria used to evaluate the subject matter are suitable in the specific circumstances of the engagement.

²³ Paragraph .A18 of AT-C section 205 and paragraph .A17 of AT-C section 210.

Significant Aspects of the Subject Matter

27. Considering qualitative factors helps the practitioner identify aspects of subject matter that may be more significant to intended users. Depending on the facts and circumstances of the engagement, this may also enable the practitioner to tailor the nature, timing and extent of additional procedures to identify potential misstatements in such aspects.
28. The practitioner's perception of the needs of intended users may cause the practitioner to believe that users are likely to consider specific aspects of the subject matter and, accordingly, misstatements of those aspects more important than other aspects. Consider the following examples:
 - In an examination of controls related to security, availability and confidentiality of an organization that provides business users with a web-based customer relationship management system, disclosures about the design and operating effectiveness of controls protecting customer data from unauthorized access may be more significant to those business users because of a perceived need to maintain the confidentiality of their customer relationships.
 - Disclosures related to controls over data privacy and protection may be more significant to intended users of a report for a social media entity than to intended users of a report for an industrial products manufacturer.
29. In another example, assume that management of a wholesale produce distributor makes certain claims²⁴ regarding its food safety, employee retention and employee turnover procedures in a subject matter presentation. Claims about food safety are likely to be important to intended users of the report because deficiencies in food safety procedures could have serious consequences on human health and result in noncompliance with relevant food and drug regulations; therefore, disclosures about the distributor's claims about food safety procedures may be more significant to intended users than those related to employee retention and employee turnover. For that reason, the practitioner may consider misstatements in disclosures about food safety more important than misstatements related to other aspects of the subject matter.

²⁴ As used in this document, a claim is a statement about one or more aspects of the subject matter made by the responsible party. In contrast, as defined in the attestation standards, an assertion is a declaration about whether the subject matter (as a whole) is in accordance with criteria. For example, in a report on contractual compliance, a responsible party may make a number of disparate claims related to individual contractual requirements; however, the responsible party's assertion is about whether the entity is in compliance with the contract (taken as a whole).

Communications to Intended Users

30. If the practitioner is aware of the entity's previous communications to users — for example, in relation to the expected outcome of the measurement or evaluation of the subject matter — that communication may also be taken into consideration when evaluating the materiality of a misstatement. For example, assume a producer of baked goods claims on product packaging, in a national ad campaign, and in its sustainability report, that its baked goods are 100% organic. As a result of procedures performed, the practitioner determined that a single ingredient of the baked goods did not meet the specified criteria for organic products. That misstatement might represent a small proportion of the subject matter taken as a whole (that is, when considered in relation to all the ingredients in the product). However, because the producer's claim that its baked goods are 100% organic is likely to influence consumers' decisions, the practitioner might conclude that even a numerically small quantitative misstatement is likely to be material to intended users.

Relationship of Parties

31. A practitioner may consider whether a misstatement relates to the relationship between management and other parties. Disclosures involving related parties may be of particular interest to intended users; a practitioner may consider misstatements in such disclosures differently than misstatements in disclosures that involve unaffiliated parties. As an example, assume that management makes certain claims about the entity's compliance with published privacy practices. If, through examination procedures, the practitioner identified an instance of unauthorized sharing of the email addresses of a limited number of customers with a related party for use when marketing the related party's products, the practitioner may consider the related party relationship a significant factor in assessing the root cause of the misstatement and whether the misstatement is material.

Contracts, Laws, or Regulations

32. When a misstatement could affect compliance with a contract, law, or regulation, a practitioner may consider the possible consequences of noncompliance. For example, noncompliance with regulatory requirements could result in a monetary fine, default of contract or regulatory action.

Uncertainties

33. When making judgments about materiality, a practitioner may consider the inherent uncertainty of the subject matter. The practitioner may perform additional procedures that focus on obtaining evidence about the quality of the measurement process, whether errors in the process have been identified, and whether the nature and extent of related disclosures are sufficient. The attestation standards for prospective financial information state that materiality is judged in light of the expected range of reasonableness of the information; therefore, intended users would not expect prospective financial information to be as precise as historical financial information.²⁵ Likewise, a practitioner may assume that intended users of attestation reports dealing with inherently uncertain subject matters would ordinarily expect such information to be less precise than subject matters that are more consistently measured.
34. As an example, assume an entity makes certain claims about its GHG emissions. As discussed in AICPA Guide *Attestation Engagements on Sustainability Information (Including Greenhouse Gas Emissions Information)* (sustainability guide), estimating GHG emissions is subject to a high level of inherent uncertainty that may sometimes exceed quantitative materiality. Paragraph 5.17

of the sustainability guide provides examples of matters that create or increase uncertainty in GHG emissions measurement. When measurement uncertainty is high in an examination engagement, the sustainability guide indicates that the practitioner should use professional judgment to evaluate whether the various aspects of the measurement process (for example, measurement techniques, assumptions, and conversion factors) give rise to an increased risk of material misstatement. If so, the practitioner should tailor additional procedures to respond to the identified risks. The practitioner also should consider whether additional disclosures related to the existence of measurement uncertainty, together with a quantification of the uncertainty (such as the range of reasonable values for the measure), are necessary to provide meaningful information to intended users of the subject matter regarding the point value reported. When high measurement uncertainty is identified in a review engagement, the sustainability guide states that the practitioner should place increased focus on those areas of measurement uncertainty arising from the various aspects of the measurement process in which the practitioner believes there are increased risks that the sustainability information may be materially misstated.

²⁵ Paragraph .A25 of AT-C section 305, Prospective Financial Information.

Evaluating Whether Identified Misstatements Are Material

35. In an examination, the practitioner should accumulate uncorrected misstatements identified during the engagement, other than those that are clearly trivial, (for example, on a summary of misstatements) for the purpose of evaluating whether they are material individually or in the aggregate, when forming the practitioner's opinion.²⁶ In a review, the practitioner should evaluate whether uncorrected misstatements are material, individually or in the aggregate when forming the practitioner's conclusion.²⁷
36. In a SOC 2® engagement, for example, a practitioner may, in evaluating a control based on a criterion, identify a deviation that is determined to be a deficiency (misstatement). The practitioner would then consider whether the deficiency could result in the service organization's failure to achieve one or more of its service commitments and system requirements. When making this consideration, the practitioner would evaluate whether other identified controls were operating effectively that would compensate for the control with the deficiency. The practitioner uses professional judgment to evaluate the effect of the deficiency on control effectiveness taken as a whole, that is, on whether controls were suitably designed and operating effectively to provide reasonable assurance that the service organization service commitments and system requirements were achieved based on the applicable trust services criteria, in all material respects.
37. When evaluating whether a misstatement is material, a practitioner may follow a process similar to the following:
- *Consider the expectations or thresholds, if any, established during planning or risk assessment.* If the practitioner has been able to establish thresholds, the practitioner compares the results of the procedures to the expectations or thresholds established during planning. For example, the nature and frequency of deviations from quantitative thresholds established during planning would be considered when evaluating the materiality of any resulting misstatement.
 - *Consider whether the misstatement results in the failure to meet one or more specific criteria; that failure may be indicative of a material misstatement of the subject matter taken as a whole.* On the other hand, the failure to meet a specific criterion may not always result in a material misstatement. For example, missing a deadline to send notifications by one day might be viewed as immaterial to compliance as a whole.
 - *Consider qualitative factors.* The preceding section, "Consideration of Qualitative Factors," lists useful factors and presents several examples that illustrate how consideration of qualitative factors may affect the practitioner's evaluation of materiality.

²⁶ Paragraphs .45 and .A47 of AT-C section 205.

²⁷ Paragraph .42 of AT-C section 210.

- *Consider the effect of the misstatement on the subject matter, considering the criteria taken as a whole.* In a compliance report, an entity's objective might be to comply with all requirements set forth in a contract. In another example, a deficiency in a general information technology control that affects multiple applications may have a more pervasive impact on the effectiveness of internal control than a misstatement that relates only to a specific application.

Aggregating Misstatements

38. In an examination, the practitioner should accumulate uncorrected misstatements identified during the engagement, other than those that are clearly trivial, (for example, on a summary of misstatements) for the purpose of evaluating whether they are material individually or in the aggregate, when forming the practitioner's opinion.²⁸ In a review, the practitioner should evaluate whether uncorrected misstatements are material, individually or in the aggregate, when forming the practitioner's conclusion.²⁹
39. Misstatements of subject matters that rely on qualitative measurements cannot be aggregated as easily as misstatements of amounts can be (for example, dollars). Evaluating the aggregate effect of uncorrected individually immaterial misstatements of qualitative subject matter involves determining whether there are any commonalities among them.

40. The practitioner is required to evaluate whether the aggregated effect of the uncorrected, individually immaterial misstatements results in a material misstatement of the subject matter taken as a whole.³⁰

Finding the Common Denominator

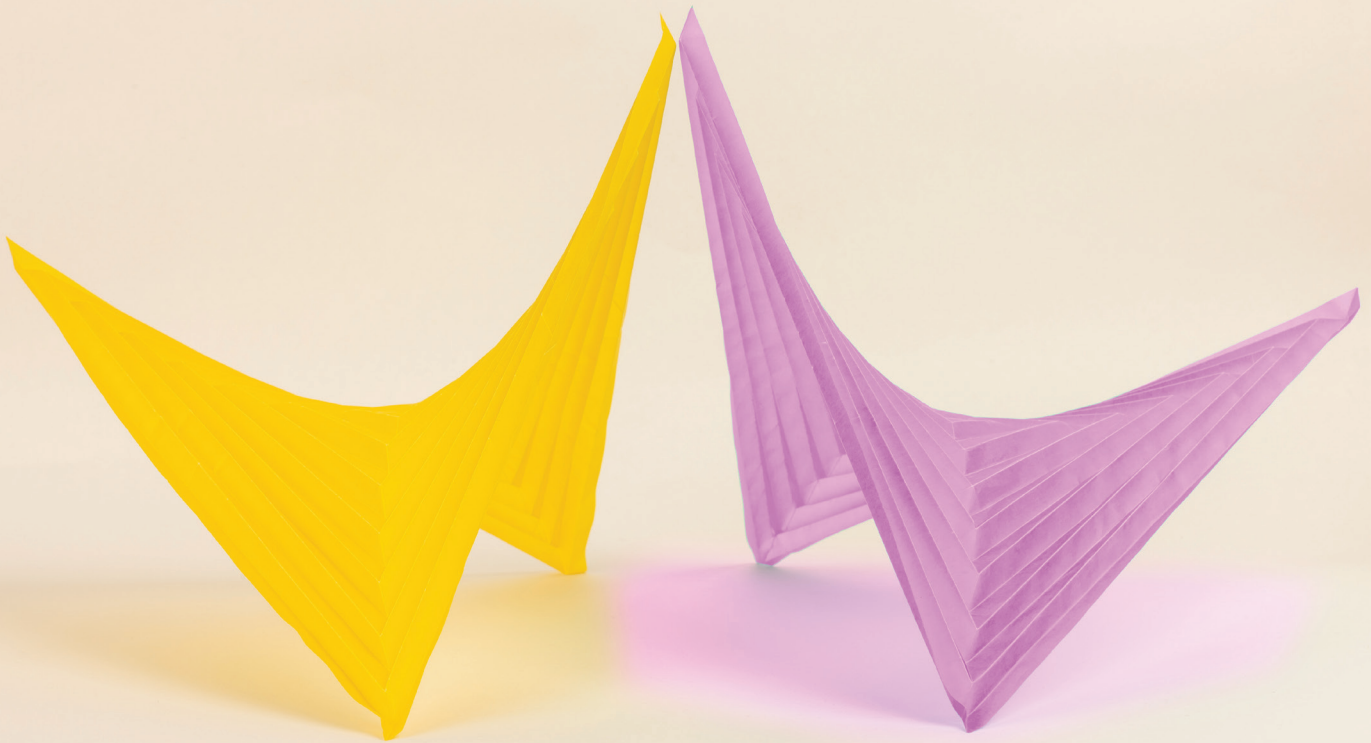
41. Conceptually, misstatements can be aggregated only if they relate to some common trait or theme, that is, a common denominator. When an individual attestation engagement addresses a wide range of subject matter aspects, it may be difficult to identify a common denominator other than the subject matter taken as a whole. For example, determining materiality is difficult for narrative presentations because there might be no common denominator – the emphasis given to aspects of the subject matter presented, adjectives used in the presentation, and the tone of the statements made are relatively subjective.
42. Identifying a common denominator might include consideration of one or more of the following:
- *The claims management is making about the subject matter, which are generally a function of the criteria being used to evaluate it.* There could be a single claim (for example, "there are 50,000 square feet in this warehouse") or a series of integrated claims (for example, a schedule of investment returns) or disparate claims (for example, compliance with a series of unrelated compliance requirements).

²⁸ Paragraph .45 and .A47 of AT-C section 205.

²⁹ Paragraph .42 of AT-C section 210.

³⁰ Paragraph .59 of AT-C section 205 and paragraph .42 of AT-C section 105.

- *The common topics or aspects of the subject matter to which the misstatement relates.* Although it may not be possible to add up qualitative misstatements, these misstatements may be grouped according to the categories, topics, claims or aspects of the subject matter in the report. For example, in a sustainability engagement, the practitioner identified a misstatement in management's claim relating to employment and another misstatement in management's claim relating to diversity of the workforce. The practitioner may be able to consider these misstatements in the aggregate because they both relate to the social dimension of sustainability.
 - *Whether the misstatement may have an indirect effect on misstatements identified in other areas of the engagement.* For example, an otherwise immaterial overstatement of an item might indirectly affect a more significant calculation that incorporates the item, causing that calculation to fall below the required minimum threshold included in a contractual requirement. Similarly, the lack of a required approval for a relatively unimportant transaction might not be material in and of itself, but it could have implications for the effectiveness of controls over areas users might consider important, or it could have implications across the broader subject matter (for example, logical access controls).
 - *The specific criterion to which the misstatement relates.* In the case of a SOC 2® examination performed in accordance with AT-C section 205, for example, the practitioner usually aggregates all misstatements (deficiencies) identified during control testing by their effect on an individual criterion because the violation of a criterion may be indicative of a material misstatement.
 - *The type or cause of the misstatement.* Understanding the root cause of a misstatement may assist the practitioner with evaluating its materiality. For example, a misstatement may be the result of a clerical employee's failure to perform a procedure or the intentional override of a control by management. The former may or may not be considered material, whereas the latter may be considered material due to management's intent.
43. When a common denominator is identified, the misstatements may be accumulated in a list (for example, a listing of misstatements by claim made in a narrative presentation).



44. In some situations, immaterial misstatements that otherwise do not have a common denominator may have a similar effect on the subject matter presentation taken as a whole. For example, in a narrative presentation, a practitioner might identify 10 immaterial misstatements that all relate to different aspects of the subject matter. If the effect of the misstatements is to make the subject matter presentation, taken as a whole, look better than it really is, the practitioner would consider whether the subject matter presentation could be misleading to intended users.

45. When evaluating whether the misstatements in the aggregate are material, the practitioner uses professional judgment. In a compliance examination, for example, the practitioner would evaluate (a) the nature and frequency of the noncompliance identified and (b) whether such noncompliance is material relative to the nature of the compliance requirements.³¹ Depending on those factors, a practitioner may determine that immaterial failures to fulfill two unrelated compliance requirements would not aggregate to a material misstatement. Conversely, the practitioner may conclude that they represent a material misstatement because the two requirements relate to the achievement of a common compliance objective.

³¹ Paragraph .19 of AT-C section 315, *Compliance Attestation*.

Determining Whether the Effect of Material Misstatements is Pervasive

46. In an examination engagement, the practitioner should form an opinion about whether the subject matter is in accordance with (or based on) the criteria, in all material respects. In forming that opinion, the practitioner should evaluate
- a. the practitioner's conclusion regarding the sufficiency and appropriateness of the evidence obtained and
 - b. whether uncorrected misstatements are material, individually or in the aggregate.³²
47. In a review engagement, the practitioner should form a conclusion about whether the practitioner is aware of any material modifications that should be made to the subject matter in order for it to be in accordance with (or based on) the criteria. In forming that conclusion, the practitioner should evaluate
- a. the practitioner's conclusion regarding the sufficiency and appropriateness of the review evidence obtained and
 - b. whether uncorrected misstatements are material, individually or in the aggregate.³³
48. In forming that opinion or conclusion, the practitioner evaluates the materiality of the effects of uncorrected misstatements on the subject matter and determines whether an unmodified opinion or conclusion is appropriate. In an examination engagement, if the practitioner determines that the effects of the uncorrected misstatements are material but not pervasive, the practitioner would express a qualified opinion. If the effects are both material and pervasive, the practitioner should express an adverse opinion. In a review engagement, if the practitioner determines that the effects of the uncorrected misstatements are material but not pervasive, the practitioner would express a qualified conclusion. If the effects are both material and pervasive, the practitioner should withdraw from the engagement when withdrawal is possible under applicable laws and regulations.^{34, 35}
49. The attestation standards state that the term pervasive describes the effects on the subject matter of misstatements or the possible effects on the subject matter of misstatements, if any, that are undetected due to an inability to obtain sufficient appropriate evidence. Pervasive effects on the subject matter are those that, in the practitioner's professional judgment,
- a. are not confined to specific aspects of the subject matter;
 - b. if so confined, represent or could represent a substantial proportion of the subject matter; or
 - c. in relation to disclosures, are fundamental to the intended users' understanding of the subject matter.³⁶

³² Paragraph .59 of AT-C section 205.

³³ Paragraph .42 of AT-C section 210.

³⁴ Paragraph .72 of AT-C section 205.

³⁵ Paragraph .53 of AT-C section 210.

³⁶ Paragraph .A105 of AT-C section 205 and paragraph .A83 of AT-C section 210.

50. It is reasonable for the practitioner to consider whether the subject matter, taken as a whole, is presented in accordance with suitable criteria when determining whether a misstatement is pervasive. When determining whether a misstatement is pervasive, a practitioner may consider the effects of the material misstatement on the criterion or criteria to which it relates as well as the significance of such criteria to the subject matter taken as a whole. This determination might indicate that the material misstatement may affect a substantial portion of the subject matter and, therefore, have a pervasive effect on the subject matter of the engagement. Alternatively, a misstatement may affect multiple criteria but be confined to a single aspect of the subject matter that does not represent a substantial proportion of the subject matter; accordingly, it might not be pervasive to the subject matter.
51. The following examples illustrate how a practitioner may consider such factors when determining whether the effect of a material misstatement is pervasive to the subject matter taken as a whole.

Example 1: In a compliance attestation examination, the practitioner was engaged to examine and opine on whether the entity had complied with requirements related to the annual reporting for grant funds. The requirements comprise the timeliness, completeness, accuracy and approval of such reports. After performing the examination procedures, the practitioner found the following exceptions:

- a. Of 10 reports, three were filed late; one of the reports was not filed.

- b. Of 10 reports, seven were incomplete because the reports contained only 11 months of information. (The reports were supposed to include 12 months of information.)
- c. Of 10 reports, two were not accurate because the reports included information related to the wrong grant.
- d. Of 10 reports, eight were not appropriately approved.

These exceptions affect multiple aspects of the entity's compliance with the grant reporting requirements; therefore, the practitioner concluded these misstatements were pervasive and issued an adverse opinion.

Example 2: In a SOC 1® engagement, the claims-processing application is the main system used to provide processing services to user entities. Many of the transaction-processing control objectives included in the report depend on the effectiveness of controls over employees' access to the system and change management controls. As a result of performing procedures, the practitioner identified the following control deviations:

- a. Documentation did not exist to support the approval of access for four out of 25 randomly selected new employees
- b. Terminated employees' access to the system was not removed for six out of 25 randomly selected terminated employees.

- c. Employees who changed roles did not have their access modified for four out of four randomly selected employees with job changes.
- d. User access reviews were not performed during the examination period.
- e. Developers had unrestricted access to the production environment.

After considering the effect of these deviations, particularly the impact of developers' unrestricted access to the production environment on control objectives related to logical access, change management, and other business-process-related control objectives, the practitioner determined that these deviations resulted in deficiencies considered material to the achievement of those control objectives. As such, the practitioner determined that the material misstatements were pervasive to the subject matter and issued an adverse opinion.

Example 3: In an examination engagement on sustainability information, the practitioner identified several misstatements relating to the reported indicators. The practitioner identified the following misstatements:

- a. The total volume of water withdrawn was understated due to exclusion of one of the sources of water.
- b. Total consumption of solar electricity was understated due to outdated emissions conversion data.

- c. Total number of employees was understated due to the addition of a new business prior to the end of the applicable fiscal year.

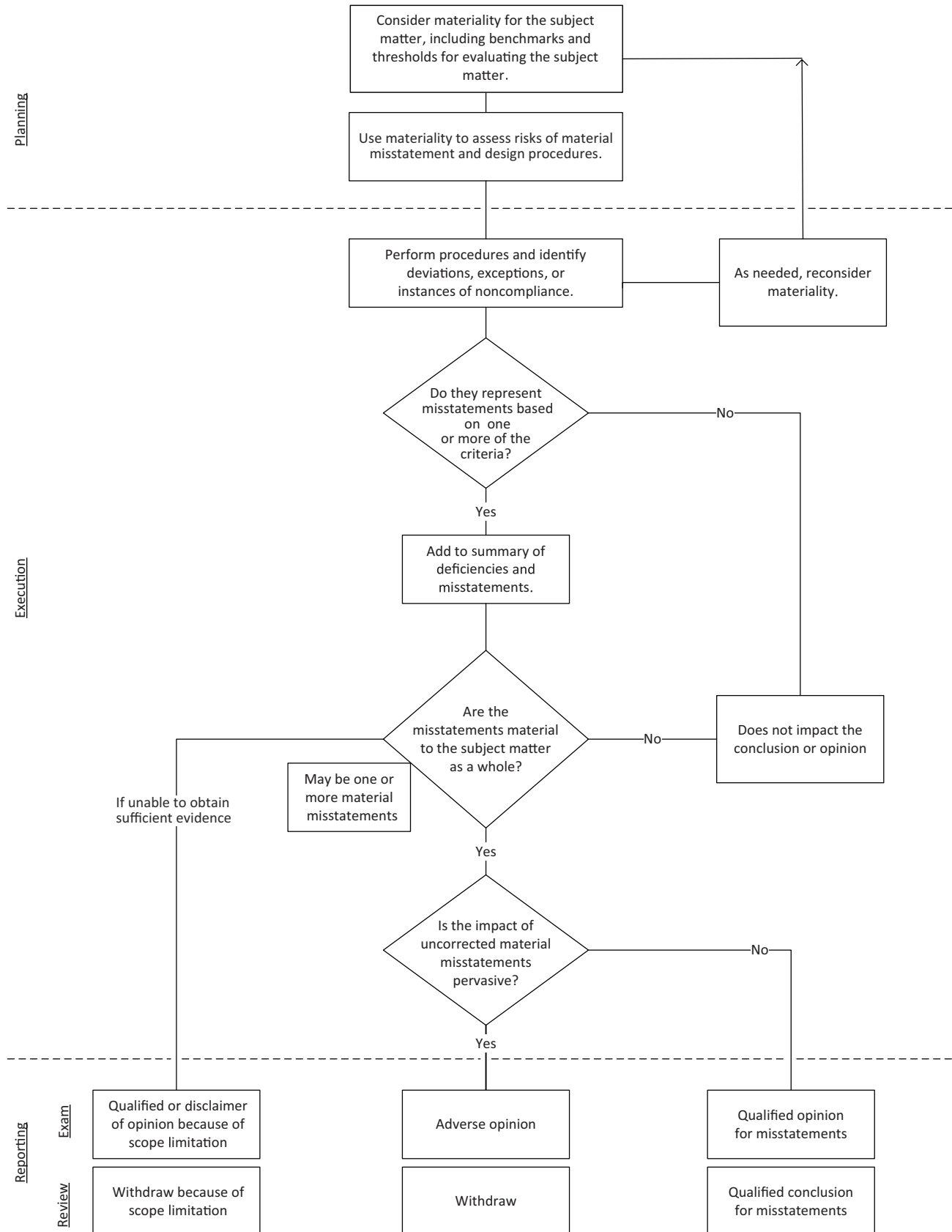
The practitioner concluded that these misstatements are individually material but not pervasive to the subject matter because they relate to different aspects of the subject matter, are confined to those aspects, and do not represent a substantial proportion of the subject matter. Further, the narrative disclosures relating to these indicators do not appear to be misleading nor do they omit information that is fundamental to the intended users' understanding of the subject matter. Accordingly, the practitioner determined that the material misstatements were not pervasive to the subject matter and issued a qualified opinion, rather than an adverse opinion.



Summary

52. Considering materiality in attestation engagements when misstatements in certain aspects of the subject matter cannot be quantified is challenging. This document addresses materiality considerations in all phases of the attestation engagement: planning, performing and forming a conclusion. However, materiality considerations are ultimately a matter of professional judgment.

Appendix – Life Cycle of Materiality





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